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MAINSTREAMING STUDENTS WITH PHYSICAL DISABILITIES INTO PHYSICAL EDUCATION

by

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Jane Watkinson

Supervisor

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Date Sept 30/80

DEDICATION

This thesis is dedicated to all those individuals with physical disabilities who have the tremendous will and desire to participate in physical activity.

ABSTRACT

In recent years there has been an increased thrust to mainstream students with physical disabilities. Although this trend has been occurring, little has been done to assess the mainstreaming of students with physical disabilities in physical education. Virtually all data-based literature has dealt with mainstreaming into schools and classrooms with no consideration of integration into physical activity.

The purpose of this study was to investigate, across Canada, the mainstreaming of students with physical disabilities into physical education programs. Two major areas were indentified as being crucial for this study. The first was to identify barriers that may affect the mainstreaming of students with physical disabilities into physical education. The second was to describe the frequency and degree of participation of physically disabled students in elementary and secondary school physical education.

Results from this study indicate a number of factors that may act as barriers to mainstreaming. The majority of administrators indicated that their school had some type of environmental condition that would act as a barrier to mainstreaming. The barriers included both indoor and outdoor conditions.

Although teachers were very positive towards mainstreaming in education in general, their overall attitude toward mainstreaming specifically in physical

education was less positive. Teachers identified a number of concerns regarding the mainstreaming of physically disabled students in physical education. These included dealing with special medical problems and the risk to the safety of both the disabled and non-disabled student. In addition a number of difficulties associated with mainstreaming in physical education were identified. These included difficulty in choosing activities that benefit both the disabled and non-disabled, and difficulty in assessing the skills and abilities of students with physical disabilities.

Almost half of the teachers had taught physical education to students with physical disabilities at some time in their carreer. However, only a small percentage of teachers had received any formal training in teaching students with physical disabilities in physical education.

There were noticeable differences in the levels of participation in specific activities by students with physical disabilities. The nature of certain activities facilitated full participation or involvement in a special role, while other activities did not promote the participation of students with physical disabilities.

Results indicate that approximately one-third of schools in Canada have students with physical disabilities. These students may not be participating in physical education. In fact, 21.8% of administrators indicated that students with physical disabilities attended academic classes or other activities instead of physical education.

In addition, 8.6% of teachers indicated that students with physical disabilities attended physical education classes but did not participate.

In light of these findings, there are a number of implications for mainstreaming in physical education with regard to teacher training, support resources and school facility construction.

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Chapter I

Introduction

Since the end of World War II there has been a thrust toward the integration of individuals with physical disabilities into physical activity programs. At the conclusion of World War II there were thousands of disabled war veterans who needed more than just physical rehabilitation to be reintegrated into society (Arnheim, Auxter & Crowe, 1977). This need resulted in the development of community programs for veterans which in turn led to programs for physically disabled children in schools. During the late 1950's and early 1960's an increasing interest in physical fitness in North America provided additional stimulus for physical education programs for the physically disabled (Sherrill, 1981). Although there was a recognized desire for mainstreaming (placement of disabled students in regular programs) in education in many areas of Canada and the United States few mainstreamed programs were being provided. As a result, in the late 1960's and throughout the 1970's, law suits were brought against a number of Boards of Education both in the United States and in Canada. These law suits resulted in the formation of a number of laws and policies regarding mainstreaming. A landmark law was Public Law 94-142, The Education for All Handicapped Children Act, which was passed in the United States in 1975. The importance of physical education for disabled individuals is emphasized in this legislation. Crowe (1981) points out that

the physical education curriculum was the only education curriculum specifically referenced in this law. Section 121a.307 of the rules and regulations governing the statute's implementation outline the school system's responsibility in providing physical education services to its handicapped students. It states:

121a307 Physical Education

1. General

   Physical Education Services, specially designed if necessary , must be made available to every handicapped child receiving a free and appropriate public education.

2. Regular Physical Education

   Each handicapped child must be afforded the opportunity to participate in the regular physical education program available to non-handicapped children, unless

   a. the child is enrolled in a separate facility; or

   b. the child needs specially designed physical education, as prescribed by the child's individualized education program.

3. Special Physical Education

   If specifically designed physical education is prescribed in a child's individualized program, the public agency responsible for the education

of that child shall provide the services directly; or make arrangements for it to be provided through other public or private programs.

4. Education in Separate Facilities

The public agency responsible for the education of a handicapped child who is enrolled in a separate facility shall ensure that the child receives appropriate physical education services in compliance with paragraphs (a) and (c) of this section.(Megginson, 1980, p. 206).

The Public Law 94-142 has resulted in increased numbers of handicapped chi dren being placed in regular school physical activity programs in the United States. This law has also had an impact on mainstreaming in Canadian schools.

In comparison to the United States, Canada has no national law regarding mainstreaming. This is due to the fact that there is no national or federal Ministry of Education in Canada. Instead, education is a provincial responsibility. This has resulted in each province developing its own guidelines or policy regarding mainstreaming. In addition, each province is responsible for its own teacher training and sets the teacher qualifications which may or may not be acceptable in another province. Teacher training may well have an impact on mainstreaming. Training which provides exposure to disabled students as well as knowledge about the various kinds of disabilities

and activities that facilitate participation by disabled students may well help the teacher in increasing the participation level of disabled students in regular physical education classes.

Although the federal government has no direct control over education in the provinces it has made a number of statements which have implications at the provincial level. For example, in 1976 Canada accepted the International convent on Economic, Social and Cultural Rights of the United Nations. In Article 13 of this convent, Canada recognizes the right of everyone to education. Canada also recognizes that primary education shall be compulsory for all children; and such education will be provided free of charge. In addition, the federal government's concern with mainstreaming is shown in the Obstacle Report of the Special Committee on the Disabled and Handicapped (1982) which was commissioned by the House of Commons. This Report made the following recommendations:

1. "that provincial Ministers of Education be encouraged to develop, for use in teacher training programs, course materia and teaching aids about physical and mental disability
2. that professional schools and faculties be encouraged to include course material about disabilities."

Although the Federal Government is not directly responsible for education, it is willing to provide support to special projects which address the intention of the first

recommendation.

In Canada, the provincial guidelines and policies on mainstreaming are variable from one jurisdiction to another. Some of these policies and guidelines have been the result of lawsuits such as the Shelly Carriere case in Alberta. This lawsuit was a result of Shelly Carrier being refused admittance to a regular school in her home district. The judgement of this case revolved around the interpretation of certain statements of part 8 of the Alberta School Act. In the Carriere lawsuit the mandatory effect of section 136 of Part 8 was upheld. This section states very clearly that a school board shall accept every pupil whose parents reside in its district or divison; or direct the pupil to a school in another district or division. If the latter course is followed the board shall be responsible for the costs involved. In other provinces the mainstreaming movement has been influenced by major reports such as the 1976 COPEX report in Quebec. Robichaud and Enns (1980, p. 203) indicate that this report had a major impact on increasing the provision of integration services in Quebec.

Statement of the Problem

This study was concerned with the mainstreaming of students with physical disabilities into regular school physical education programs. In order to investigate the mainstreaming of these students two major sub-problems were identified: (a) to identify, in elementary and secondary

schools, barriers that may affect the mainstreaming of students with physical disabilities into physical activity programs, and (b) to describe the frequency and degree of participation of physically disabled students in regular elementary and secondary school physical education programs.

In order to examine the first sub-problem, data were gathered on possible factors that may affect the mainstreaming of students with physical disabilities in regular schools. In order to investigate the second sub-problem, data on the frequency of participation were examined along with data describing the mobility of students who are mainstreamed.

Justification of the Study

Although there has been an increased thrust to mainstream students over the last decade little has been done to evaluate mainstreaming. Allen (1980, p. 54) states that "existing research on mainstreaming is sparse, fragmented, inconsistent, and is primarily descriptive or anecdotal rather than empirical and data based". At this time most of the literature has continued to be concerned with the legal implications of mainstreaming; and little of it, with the exception of studies on teacher attitudes, has been data-based research. In physical education this is particularly true. McClenaghan (1981, p. 4) states: "to date, few attempts have been made to define what constitutes successful integration in the physical education setting."

The need for assessment of mainstreaming in regular school physical education programs in Canada was recognized in the report of the research priority development conference which was held in 1981, the International Year of Disabled Persons. One of the recommendations that evolved from this conference advised the need for "assessment of school-based physical education, recreation and athletic programmes for disabled children". (Report of the Research Priority Development Conference, 1981, p. 8). Such assessment requires data on the frequency of participation of students in these programs as well as data on factors that may be influencing this participation. These factors may include such obvious barriers as environmental or facility conditions, but may also include more subtle influences such as teacher attitudes and teacher preparation. While it is impossible to determine causal relationships through descriptive studies, it was recognized that descriptive information on mainstreaming would contribute to an understanding of the status of mainstreaming; and that it would alert researchers to possible questions that require study. As a result, Watkinson and Bentz, in 1985, directed a nation-wide study by the Adapted Programs Committee of the Canadian Association for Health, Physical Education and Recreation. This study investigated the mainstreaming of physically disabled students in physical education classes in elementary and secondary schools in Canada. The study

employed the survey technique to gather data on the participation of disabled students in physical education, recreation, intramural and intercollegiate programs. A second purpose was to gather data on factors that may be influencing this participation. The research presented in this thesis is part of this larger study.

Definitions

For the purpose of this study, the term physically disabled refers to any persons who have permanent or long term impairment of mobility. They may or may not require the use of some type of special equipment for mobility such as cane(s), crutch(es), walker, manual wheelchair or electric wheelchair. This may include individuals with cerebral palsy, muscular dystrophy, spina bifida, amputation, spinal cord injury or other conditions. In this study, the term physical disability does not include individuals recovering from temporary medical conditions (e.g. fractures) or individuals with hearing impairment, visual impairment, mental handicaps, or physical disabilities that do not impede mobility.

The term regular school refers to both academic and vocational schools.

Three terms are commonly used to describe the placement of disabled persons in the regular stream of society. These terms are integration, normalization, and mainstreaming. Integration is a general term which refers to the placement

of disabled persons in the least restrictive environment. Both normalization and mainstreaming are more specific in relation to integration. Normalization is usually used in terms of placing the more profoundly handicapped within the local community services (Robichaud and Enns, 1980). On the other hand mainstreaming is used to describe the placement of less severely handicapped children in the regular classroom. In much of the literature, mainstreaming is used to describe a process of moving children towards non-segregated environments. In this thesis, however, the word mainstreaming is used to describe status: that is, the placement of disabled students in regular educational programs.

Limitations

This study was limited by the representativeness of the sample of teachers and administrators in elementary and secondary schools across Canada. An assumption was made that the respondents were knowledgeable and willing to be truthful in their responses. Certain questions required the respondents to remember past events and provide information that may have been considered personal. As well this study was limited by the validity and reliability of the research instruments.

Delimitations

This study was delimited in that only one administrator and one teacher from each school were asked to fill out the respective questionnaires. It was further delimited in that an order of preference was stated to guide the administrator in choosing the teacher who would respond. This order of preference was:

1. any teacher who instructs physical education to a class which contains both physically disabled and non-disabled students,
2. a physical education teacher,
3. a classroom teacher who teaches physical education,
4. Any teacher who instructs physical education to only physically disabled students.

This order of preference was requested in order to obtain the most information regarding mainstreaming. Another delimitation was made in defining the target group as students with mobility problems. Information on other disabled or handicapped students was not sought.

The scope of this document was restricted to gathering data on the attitudes of teachers, their knowledge or professional preparation, the availability of educational materials and knowledgeable consultants, availability of aids and special programs, facility and architectural barriers, nature of the physical activity curriculum, and availability of suitable equipment. Other data were collected on the questionnaires but were not included in the

present analysis. Information regarding the attitudes of able-bodied peers toward mainstreamed students as perceived by the teacher was excluded, as was the information regarding the attitudes of parents as perceived by administrators. Data collected from a secondary source is questionable in terms of validity.

Chapter II

Review of Literature

The material reviewed for this study was in three main areas. First information regarding the perceived benefits of mainstreaming was examined. Secondly, models of mainstreaming were investigated. This material assisted in determining various levels of mainstreaming and participation in regular school activities. Thirdly, information was gathered regarding possible barriers to mainstreaming such as teacher attitudes toward the disabled, and professional preparation at both the preservice and inservice levels.

Perceived Benefits of Mainstreaming

For many years disabled students were either isolated in institutions or in residential schools. In the last decade, however, a large movement has been taking place to integrate these students into the regular educational system. This movement has been justified on the basis of the preceived benefits of mainstreaming for the disabled child.

According to Linton and Juul (1980, p. 433, 434) the movement toward mainstreaming is based on four major assumptions. These assumptions are as follows:

1. the regular classroom setting is less isolating for the handicapped child,
2. disabled children benefit academically and socially from integration with regular students,

3. regular students in mainstreamed classes will come to understand and accept disabled students in a more positive manner, and
4. the teacher's attitude and abilities are crucial in the success or failure of mainstreaming.

Although mainstreaming is justified on the perceived academic and social benefits to the physically disabled child, there is no guarantee that every disabled child will be less isolated or will make academic and social gains from being placed in a regular school with able-bodied peers. In fact, for some students mainstreaming could result in more isolation than if they were in a special school.

In addition to the perceived benefits outlined by Liton and Juul, through physical activity the disabled child should be able to gain both physically and mentally. In a study by Dresen and Netelenbos (1983) it was found that through intensified physical activity disabled children were able to perform the same amount of work with less energy expenditure. Also, the increased physical activity was found to facilitate their attention behavior in the classroom.

The literature examined by Liton and Juul (1980), showed that the degree of acceptance of the disabled child is highly individual; and that as the degree of disablity rises, the tendency for rejection by normal peers increases. They found that social gains for the disabled are related to small class-size and to specialized teacher training.

In summary, this literature indicates that the disabled child should gain academically, socially and physically through mainstreaming. In addition, the teacher's attitude and skills were identified as being important for successful mainstreaming. In order to determine whether these assumptions apply to physical education, a number of key areas were investigated. To ascertain if regular physical education classes were actually providing opportunities in which the disabled were taking part, the level of participation by the disabled students was examined. In addition, because the teacher was identified as the key to successful integration, his (her) attitude and professional preparation were investigated.

The purpose of this study was to investigate the mainstreaming of students with physical disabilities into regular school physical education programs. In examining the literature on mainstreaming in physical education, it was found that there was little data-based literature on this subject. Virtually all data-based literature dealt with mainstreaming into schools and classrooms, with little consideration of integration in physical activity.

As a result of the lack of literature regarding mainstreaming in physical activities, a review of pertinent material on mainstreaming in other contexts was considered. However, Allonby (1983) notes that although students with disabilities are able to participate in many regular classroom activities, it is in physical education where the

major difficulties arise. This is not surprising because the very nature of physical education requires that students be very mobile in order to participate.

Models of Mainstreaming

The first conceptual framework for considering issues related to mainstreaming was developed by Reynolds (1962). This model, called the cascade system, gained wide acceptance and was adopted in 1974 by the Council for Exceptional Children as part of its overall policy statement. More recently, the Special Education Services Branch of Alberta Education (1982) has expressed support for this model as a means of moving children into less restrictive and protected environments. Molloy (1975) notes that the cascade system is a series of least restrictive alternatives which indicates that disabled children can gradually transfer either up or down the hierarchial levels. This model, in its various adaptations, lists the possible alternatives from the regular classroom setting at the top through to the residential hospital setting and/or home-bound instruction at the bottom. As one decends the levels, the programs become more specialized and there are greater amount of resources required. Within the regular classroom (at the top of the model), three modifications can be made: a special consultant can be added to support the regular classroom teacher, an itinerant teacher can be used to support the disabled child, and a resource room can be

developed for the part-time instruction of students with disabilities. If the disabled child is not able to function with these modifications, then either part-time or full-time special classes are desirable. For more severe disabilities, a special school setting may be required. This could be either a special day school, a residential school, a day hospital school, or a residential hospital school. At each successive level of the cascade system, the more severe the disability the more expensive the program, and the less the chance that the child will be able to return to a regular classroom (Molloy, 1975).

A number of people have attempted to modify the cascade system and apply it directly to physical education (Aufsesser, 1981; Kalakian & Eichstaedt, 1982). In each of the cases the basic cascade model is used, and adaptations are made with regard to physical education placements. The model which most closely follows the cascade system and which provides the greatest number of placement alternatives for physical education is the model by Kalakian and Eichstaedt (1982). This model has a hierarchy of levels from regular physical education through to physical education in a residential school hospital. Four modifications to the regular school physical education class are listed before the child is placed into a full time adapted physical education class. The modifications are as follows: a regular physical education class with a specialist consultant to help the teacher, a regular physical education class with an

itinerant adapted physical education teacher to support the disabled child, a regular physical education class with additional outside support, and a part-time regular physical education class along with part-time adapted physical education. Unfortunately these modifications do not include an explanation of additional outside support, nor do they specify clearly the role of the itinerant adapted physical educator. If the disabled student is not able to function in physical education with these modifications, then a full time adapted physical education class is recommended. If the child's disability is more severe, then physical education in a special school placement may be required. These special schools could be either a special day school, residential school, hospital school or residential hospital school.

These models clearly point out that integration can occur at many different levels. As a result, any examination of student mainstreaming must first examine the level of placement (or the degree of mainstreaming) present in the school system. In addition, this literature indicates that the availability of support personnel for physical education teachers should be examined.

Attitudes Toward the Disabled

Attitudes have been a major focus by writers on the subject of mainstreaming. A number of authors have identified attitudes as being a major barrier to integration of handicapped persons. Stancic (1984, p. 273) stated: "the

success of educational integration of handicapped children is dependent upon the attitudes of social groups involved in integration...and from certain characteristics of the schools in which they are being integrated."

Bender (1981, p. 104) reviewed the literature on attitudes toward disability and disabled persons and found that it generally indicates that negative attitudes exist toward people with disabilities. Hutchinson and Lord (1979) described how often society's negative attitudes can lead to a vicious cycle which prevents disabled people from interacting with non-disabled people. They feel that society's low tolerance for individual differences leads to the disabled person being viewed as abnormal. This often results in the person being labelled; and when this occurs, the focus tends to be on the person's disability rather than on the person's abilities. People then tend to generalize or to stereotype individuals according to these labels. Stereotyping influences how people react to certain groups. This in turn often leads to the isolation and segregation of groups such as the disabled. According to Hutchinson and Lord (1979), the consequence of this cycle is such that "a person who may have started out with a relatively minor physical or mental disability now may have a major social handicap, which in turn prevents the development of self confidence and involvement in the community" (p. 18).

Wolfensberger (1972) identified five common ways in which mentally retarded persons are commonly perceived.

Steer (1983) states that these common attitudes also exist toward people with other disabilities. According to Steer (1983), the five common perceptions described by Wolfensberger can greatly influence how teachers interact with disabled students. The following are the five common perceptions identified by Wolfensberger (1972) and the implications for teachers as outlined by Steer (1983).

The first common perception of handicapped individuals is that they are sick and are in the need of healing. The implication for teachers is that they may see the problem as not being interactional. This may result in the teacher feeling that no matter what is done there will be no effect on the child.

The second common perception of handicapped children is that they are subhuman. The implication for teachers in viewing the handicapped children in this way is that the teachers see their roles as being that of caretakers rather than that of instructors.

The third way in which handicapped children can be perceived is as menaces to society. In the past, handicapped individuals were feared; and it was thought that they may have been destroying the genetic pool. This belief may have led to the feeling that the handicapped child should be isolated from the regular school setting.

The fourth way in which handicapped people may be perceived is as holy innocents, or eternal children. The implication of this view is that the teacher may feel

overprotective toward handicapped children. This may result in the teacher preventing the disabled children from the opportunity of participating in the same activities as do their able-bodied peers.

The fifth way handicapped people may be viewed is as objects of pity, or objects of charity, or as being burdens. This may result in teachers patronizing handicapped children and thus making them more dependent. If teachers have any one of these perceptions of disabled people, the degree to which the disabled individual is mainstreamed can be greatly affected.

Although a great deal of time and effort has been expended to change these historical attitudes of the general public toward disabled people, some of these attitudes still exist today. Disabled individuals still find that they have to deal with people who try to be overprotective towards them. The prevalance of this attitude needs to be taken into consideration when examining teacher attitudes toward the integration of disabled students in physical education.

A limited number of studies have specifically examined teacher perceptions toward the physically disabled. Furgang and Yerxa (1979) conducted a study with 26 first grade teachers to determine if they held role expectations for physically handicapped students that differed from those that they held for normal students. A battery of questions which used a Likert Scale type response was developed to form a Student Role Expectation Inventory. The teachers were

divided into two groups. One group received a photograph of a normal seven year old, Caucasian female, sitting on a bench; the other group received a photograph of the same girl sitting in a wheelchair. The teachers were then asked to answer the questionnaire on the basis that the child shown in the photograph had just entered their classrooms as a new student. Results showed that the teachers held significantly higher expectations for the girl who was photographed sitting in the wheelchair. Furgang and Yerxa (1979) feel that these differences may be due to the teachers responding in a way they think is socially desirable. It should be noted that the responses of teachers to a photograph of a child may be different from their responses to that same child if she were actually in their classroom.

The higher expectations of teachers for physically handicapped students has implications for how they may react toward them. If the physically handicapped students are unable to meet these high expectations, it may well result in negative teacher attitudes toward these students. This may explain why Shotel, Iano and McGettigan (1972) found that when regular teachers with favourable attitudes toward mainstreaming actually experience mainstreaming, their attitudes became more negative.

The degree of acceptance of physically disabled students by teachers is highly dependent on both the kind and the degree of the disablity. The type of disability can

greatly influence the teachers' perceptions of students. Aloria, Knutson, Minner and Von Seggern (1980) surveyed regular physical education teachers to investigate their initial perceptions toward mentally and physically handicapped children. They surveyed 57 regular elementary, junior, and senior high school physical education teachers. The subjects were randomly assigned to three groups. Each teacher was given the same questionnaire and a short summary of the child's background. Depending upon their assignments, one third of the subjects were provided with information that the child was Educable Mentally Retarded, one third that the child was Physically Handicapped, and one third received no information about any kind of handicapped condition. The results indicated that teachers felt that their training, experiences and abilities were significantly lower for the Physically Handicapped child in comparison to the Educable Mentally Retarded child.

The results of this study also indicated that stereotyping can have an influence on teacher perceptions. The physical education teachers viewed the labelling conditions of Educable Mentally Retarded and Physically Handicapped as being significantly different. In addition, their initial expectations were significantly lower in regard to the labelled child compared to the child with the same characteristics and with no label. It should be noted that teachers' perceptions may be different when they actually have disabled children in their classrooms.

Rizzo (1984) investigated differences in attitudes of physical educators toward teaching pupils with learning disabilities in comparison to teaching those with physical disabilities. Learning-handicapped pupils were identified as having mild behavioral or emotional disorders, while physically handicapped pupils were identified as having mild sensory and/or mild perceptual deficits.

A battery of questions which used a 5-point Likert scale was developed to assess the attitudes of physical educators toward teaching handicapped pupils in the regular class. This survey instrument consisted of statements such as: "learning and physically handicapped pupils should be taught with non-handicapped pupils in physical education whenever possible", and "the best way to meet the needs of learning and physically handicapped pupils is through special, separate physical education classes." Results from this study indicate that physical educators held more favourable attitudes toward teaching pupils with learning handicaps than towards those with physical handicaps. It was also found that the attitudes of physical educators were more favourable at primary (K-3) grades than at intermediate (4-6) grades and upper (6-8) grades. It should be noted that, although the data indicate that the physical education teachers held more favorable attitudes toward instructing pupils with learning handicaps, and that the attitudes of the physical education teachers were more favorable at primary grades (K-3), the results did not indicate a

significant difference.

In summary, the literature indicates that the type and severity of students' disabilities may affect teacher attitudes. In addition, it is noted that the attitudes of physical educators tend to be most positive toward mainstreaming at the lower grade levels. In examining teacher attitudes, it would be useful to distinguish between the type and severity of students' disabilities and also to note the grade levels that the teachers instruct. Information regarding attitudes of teachers from one grade level to the next and toward the severity of student disabilities may have clear implications for potential intervention programs.

Teachers have a number of concerns about mainstreaming physically disabled students. Frith and Edwards (1981) in a survey study of regular classroom teachers in the state of Georgia found that the level of concern of teachers depended on whether or not they had previous experience in instructing physically disabled students. They found that the major concerns of teachers who had never taught physically disabled students were toileting responsibilties (78%), the disproportional amount of time required by the physically disabled student (59%), lack of materials (57%), excessive paperwork (50%), and responsibility for administering medication (50%). These percentages were calculated from the number of responses to each item compared to the total number of teachers who had never

previously instructed physically disabled students.

In comparison, teachers who had previous experience with physically disabled students were less concerned with these problem areas and demonstrated a different priority in their concerns. Their major concerns were lack of materials (41%) and the disproportional amount of teaching time required by physically handicapped students (34%). The teachers who had previous experience with physically disabled students were significantly less concerned with toileting responsibilities (25%), excessive paperwork (12%), and administering medication (3%).

Both groups showed concern about the safety of the physically handicapped student. A total of 37 % of the teachers with out experience with physcially handicapped students and a total of 25% of teachers who had experience instructing physically disabled students expressed a fear of injuring them. There was concern expressed by both groups of teachers regarding the possibility of their receiving personal injury when handling physically disabled students.

Results from this study indicate that previous experience with disabled individuals can greatly influence teacher attitudes toward them. With this in mind, it is important that in future studies about attitudes, a method of identifying whether or not people have had previous exposure to disabled individuals be included. In addition, the data collected should then be analyzed to see if there are any significant differences in the attitudes between

these two groups.

Professional Preparation

A number of researchers have investigated the attitudes of teachers toward mainstreaming. However, few researchers have gone further than to examine methods of modifying or changing attitudes towards persons with disabilities (Donaldson & Martinson, 1977). Those researchers who have done so identify professional preparation as the best method for changing teacher attitudes.

Professional preparation has long been recognized as an important means in solving the problems associated with educating handicapped children. In the first volume of Exceptional Children, Baker (1934) identified the need for training teachers. He noted that this training should be for both regular teachers and for those teachers who teach in special classes for the handicapped. Baker (1934) felt that teacher institutions should require that all teachers take one or more courses dealing with the problems of the handicapped children. Additionally, he felt these institutions should offer inservice extension courses for those teachers already in the teaching profession.

A number of more recent studies have found that teachers have not been adequately prepared for teaching handicapped children, (Bird & Gansneder, 1979; Ersing, 1974; Gickling & Theobold, 1975; Jansma & Schultz, 1982). In a study by Gickling and Theobold (1975), it was found that 85%

of the regular classroom teachers surveyed felt that they lacked the necessary skills to teach handicapped students. This feeling of lack of preparedness can be a result of such factors as a lack of teacher education concerning handicapped children, lack of support resources, and a lack of experience in dealing with handicapped individuals.

Jansma & Schultz (1981) found that regular classroom elementary teachers felt a lack of expertise in accounting for individual differences. Other areas of concern identified by the regular school teachers in this study were the lack of skills, knowledge, and clarity of purpose regarding their roles and responsibilities. Ersing (1974) found, in a national survey in the United States among schools, agencies, and institutions with physical education programs for the handicapped, that only 17% of the teachers of physical education were professionally prepared with either adapted physical education or corrective therapy courses. This study also found that only 35% of the teachers reported having professional training in physical education.

Bird and Gansneder (1979) surveyed school physical education teachers to assess their level of preparedness to meet the requirements of Public Law 94-142. Data were gathered from a random sample of elementary, junior high, and high school physical education teachers. The respondents were asked to rate their knowledge of the "nature and causes" and the "motor needs and tolerance" of 26 conditions associated with the orthopedic, cardiovascular, hearing,

mental/learning, sight, and general medical conditions.

Bird and Gansneder (1979) found that many physical education teachers were not adequately prepared to provide motor experiences for handicapped children. Results from this study suggest that they were not prepared in terms of formal training, specific knowledge of handicapping conditions, and physical education programming for handicapped students.

Bird also found that a majority of physical education teachers had little knowledge about handicapping conditions. They had the least knowledge about conditions resulting in orthopedic concerns. The following percentages indicate the proportion of physical education teachers who had little or no knowledge about these specific conditions: spina bifida, 83%; Osgood-Schlatter disease, 72%; osteomyelitis, 75%; cerebral palsy, 56%; scoliosis, 46%; poliomyelitis, 42%; and amputation, 41%. This study identified the need for preservice and inservice teacher training with emphasis on providing physical educators with the knowledge of handicapping conditions and appropriate programming competencies.

With respect to formal training in physical education for the handicapped, 65% of the respondents rated their training as poor or very poor, and only 12% rated it as good or very good. This is not surprising when an examination is made of their formal training for dealing with disabled students in physical education. As undergraduates 39% of the

respondents had no courses with a major focus in physical education for the handicapped, and a further 40% had earned only one to three credits for courses in this area of study.

In summary, the literature indicates that a majority of teachers are not adequately prepared to instruct in a mainstreamed environment. The lack of professional preparation signifies a lack of knowledge about the physical conditions of the disabled students, as well as the lack of skills necessary to teach them.

Preservice Training

The research which has investigated the effect of preservice education on mainstreaming handicapped students is extremely limited. Donaldson and Martinson (1977) examined the effectiveness of using a panel of physically disabled young adults to change the attitudes of able bodied university students. They assessed the effectiveness of using live, video, and audio presentations. Changes in attitudes were measured by the Attitude Toward Disabled Persons Scale which was developed by Yuker, Black, and Young in 1970. Results from this study indicated that both live and video presentations had significant effects on the attitudes of able-bodied university students. In a study done by Alberta Education (1981) on the attitudes of students toward the disabled, it was found that both the students and the teachers who were involved felt that a live presentation by a disabled individual was more effective

than a video presentation.

The panel of disabled persons in the study by Donaldson and Martinson (1977) were approximately the same age as the university students; and they were very credible in terms of the image they presented and in their arguments relative to the normalcy of disabled persons. It should be noted that the effectiveness of this panel in changing attitudes may be directly related to their similarity in age to the target group and to their ease and skill in presentation. These factors have implications for future use of panel discussions in changing the attitudes of able-bodied individuals toward the disabled.

Naor and Milgram (1980) investigated the effects of two preservice strategies on the factual knowledge, the general attitudes of undergraduate education students and their willingness to work with exceptional children. The evaluation of knowledge and attitudes consisted of a survey which contained questions designed on a Likert Scale. Subjects were asked whether they were willing (a) to volunteer to work with exceptional children on a one time basis, and (b) to accept employment in a summer day camp for exceptional children. The authors point out that these questions were presented as actual work opportunities and not as hypothetical situations, so a positive response was seen as a serious commitment. It should be noted that, although some of these students did not respond affirmatively, it may have been due to the commitment

implied rather than due to unwillingness to work with disabled individuals.

The students were divided into two groups. One group received a traditional curriculum which consisted entirely of lecture discussion sessions; the second group received an experimental program which consisted of nine lecture sessions and six field trips relevant to special education settings. Preservice training that provides for contact with exceptional children in addition to lecture discussion was found to have an advantage over training limited to lecture discussion. The major advantages were in the areas of the student teachers' attitudes and their willingness to work with exceptional children. It must be noted, however, that both methods did improve student attitudes and their factual knowledge.

Leyser, Abrams and Lyscomb (1982) investigated the impact of a preservice teacher training program on the attitudes of prospective regular classroom teachers toward mainstreaming. The preservice training program consisted of providing information about mainstreaming as well as providing exposure to handicapped individuals. The attitudes of these education students were measured by an inventory which had been developed. It was found that these students showed a significant positive change in attitude toward mainstreaming after participating in an introductory special education course and in a practicum experience. These subjects demonstrated greater acceptance of mainstreaming as

evaluated by the attitude survey than did either of the two control groups of students which were made up of one group of elementary education majors and a second group of special education majors. It would be of interest to further investigate the experimental group at a later time to determine if their attitudes remain higher once they have been involved in teaching for a period of time.

Stanche, Haines and Van Hestern (1982) investigated the effects of two kinds of preservice training on attitude formation. The first study examined the effect that a methods course would have on the attitudes of education students toward mainstreaming. The changes in attitudes were measured by using a Teacher Placement Opinion Form. This form consisted of brief descriptions of different handicapped children. Each respondent was asked to choose where the child should be placed for educational purposes. Results of this study indicate that prospective teachers who completed a methodology class in special education had a more positive attitude toward mainstreaming.

The second study by Sanche, Haines and Van Hestern (1982) investigated the effects that a four-month extended practicum course would have on the attitudes of education students toward mainstreaming. The changes in student attitude were again measured by the Teacher Placement Opinion Form. Results indicated that prospective teachers were more open to mainstreaming following contact with handicapped children during an extended practicum course.

Investigations regarding what content these methods courses and practicum experiences in physical education should contain is limited. It is generally suggested that knowledge about disabilities and knoweldge of pertient laws is important. Both the American Association of Physical Education, Recreation and Dance and the Canadian Association for Health, Physical Education and Recreation recently addressed these issues.

Watkinson et al. (1985) identifies a number of competencies that the general physical educator needs in order to fulfill the roles of a mainstream educator. These competencies are in the areas of program planning, environmental assessment, personal communication, individualized instruction, group leadership, and administration. The following is a summary of what Watkinson (1985) feels is required in each of these areas.

In the area of program planning, general physical educators need skills in planning activity programs that will allow for maximum participation by the disabled. They need to be able to recognize when human suppport is necessary in order to plan activities for the inclusion of the disabled; and they should be able to recognize when a mainstreamed program is not beneficial and when special services are required. They need to have knowledge about existing service delivery systems for the disabled as well as information about available resources for consulting and referral.

In the area of environment assessment, the general physical educator needs the skill to evaluate facilities and equipment in order to ensure that these are conducive to mainstreaming. In terms of facilities this includes accessibility to indoor facilities such as the gymnasium, washrooms, locker and shower rooms, and to outdoor facilities such as athletic fields. Availability of equipment for integration not only includes special sports equipment but also devices for mobility used by students. In the case of a wheelchair, it should be specially designed for physical activity. This means a lightweight, low-back model. The younger children should have a wheelchair designed to fit his(her) physical needs. For example, the wheels should be smaller than those regularly used on wheelchairs.

In terms of personal communication competencies, the general physical educator needs to be able to effectively communicate with parents, volunteers, paid support personnel, and other professionals about the participation of the disabled child. They should know, as well, the role of the adapted physical educator specialist; and they should be able to communicate effectively about the students' needs, program concerns, and special areas concerning the mainstreamed student.

The general physical educator needs to have good group leadership skills. This includes knowing how to organize groups for the inclusion of the disabled student. The

general physical educator should have a repertoire of group activities suitable for both disabled and able-bodied students. As well, they should know how to adapt activities in order to include the disabled student without detriment to the able-bodied student.

If a disabled student is unable to participate in a regular physical education program the teacher needs to be able to plan individualized instruction for the disabled student. The educator should be able to oversee these programs either directly or indirectly if they are being implemented by either volunteer or paid support personnel.

General physical educators also need to have competencies in administration. They must be able to keep written records in order to monitor the progress of mainstreamed students; and they must be able to write sensitive reports for parents and other professionals.

Although Watkinson et al. (1985) identifies the competencies necessary for the general physical educator, at the present time there are no national or provincial preservice training systems for developing such competencies. Besides, in most cases there are few adapted physical education specialists available to assist the general physical educators.

In summary the literature on preservice training for teachers points to the importance for both lecture courses and those of a practical nature. Through lecture courses, students acquire a knowledge base about various disabilities

and also methods of dealing with disabled individuals. This knowledge can have a positive effect on the attitudes of these future teachers. Exposure of teachers to disabled individuals, particularly those who are of similar age and who present a credible image, have also been found to be effective in creating positive attitudes. Practicum courses which expose future teachers to disabled students have been found to be effective in helping the teachers to develop positive attitudes toward disabled individuals. Without these elements of preservice training, teachers are more likely to hold attitudes and expectations that act as barriers to the successful integration of disabled students.

It is clear from this literature that the preservice training of teachers should be examined. This should include investigating if teachers have taken a university course which dealt with disabled individuals as well as examining whether or not the course was relevant to teaching disabled students in physical education. In addition this literature indicates that it may be important to determine whether or not teachers have had exposure to disabled students.

Inservice Training

Inservice training has long been recognized as a key method of professional preparation. It provides a means for upgrading previous knowledge and provides information about totally new concepts. Inservice training has been identified as essential to successful mainstreaming (Drummer and

Semmel, 1977; Horne, 1983; and Powers, 1983). The development of knowledge, skill, and positive attitudes towards mainstreaming has been a primary justification for it.

Although there is general agreement about the need for inservice training regarding mainstreaming, there has been little research regarding how inservice training should be done. The areas of content, method, format, and design are of extreme importance for successful inservice.

In reviewing studies on mainstreaming and inservice education of teachers, Powers (1983) found that there did not appear to be one best method for inservices. A variety of activities was felt to be more effective than any single activity. Joyce and Showers (1980) found that research regarding the ability of teachers to acquire instructional skills and strategies indicated that the most effective training should include theory, demonstrations, practice, feedback, and classroom application. In a study by Crealock (1982), it was found that lecture, workshops, and demonstrations were identified as the preferred methods of inservice training by special education teachers. The respondents of this study preferred school colleagues to deliver inservice training at the local school during school time. The time period preferred was a half day session during a professional development day.

Powers (1983) found that the literature indicates a number of concerns about content. Information which is

practical and directly applicable is the most valuable; and the most meaningful inservices focus on positively affecting knowledge, skills and attitudes. Within these three areas, knowledge base is the easiest to affect while attitudes are the most difficult to influence.

Gear & Gable (1979) identified the importance of training for regular education teachers involved in mainstreaming disabled children. Their study investigated the training needs for mainstreaming as perceived by teachers. The percieved needs of teachers were found to be mainly in the following four areas: assessment of student needs, resources for learning, professional knowledge and communication. Assessment of student needs included the administering and interpreting of appropriate tests. Resources for classroom learning referred to the management of resources which can be used for the instruction of exceptional children. Professional knowledge included the knowledge of fundamental issues, terminology, and rationale for mainstreaming. Communication referred to the ability of teachers to communicate with parents, with students, and with colleagues about the goals of mainstreaming the handicapped child.

These four areas were identified by teachers regardless of their professional training and experience. However, the level of perceived competence was affected by professional training. Those teachers who had taken more advanced training, including special education courses, expressed a

higher level of confidence at these tasks.

It was noted that there was a difference between school districts with respect to training needs. This finding has implications for inservice training. Inorder for inservice training to be of greatest value there needs to be an assessment of teachers' perceived competence in each school district before planning for an inservice for mainstreaming.

In the area of techniques for inservice training for mainstreaming there is limited information. Donaldson (1980), in reviewing literature on changing attitudes toward handicapped persons, classified the techniques which have been used for changing attitudes into six major categories: (a)Direct or indirect contact with disabled persons (b)Providing information about disabilities (c)Providing persuasive messages (d)Analyzing the dynamics of prejudice (e)Disability simulation (f)Group discussion about disabilities. It was found that in several of these categories, only one or two studies have been done. This limits any definite conclusions as to the effectiveness of these methods.

The literature regarding direct or indirect contact with or exposure to disabled persons showed mixed results regarding changing attitudes. A number of studies provided positive change while other studies showed either no change or a negative change. It was found, however, that those experiences which were structured resulted consistently in positive attitude changes. It was also noted that one factor

which was common in seven of the eight studies that produced positive attitudinal shifts was an equal status relationship. This equal status relationship refers to the situation when the disabled individual is approximately the same age as the able-bodied person and/or is approximately equal to him (her) in social and in educational or vocational status.

The literature on the techniques of providing information about disabilities and of providing persuasive messages give little in the way of insight into changing attitudes. In the areas of providing information little can be concluded due to nonspecificity of information content and/or possible confounding variables such as direct or indirect contact with disabled persons.

Two studies were reviewed which examined the effects of the simulation of disabilities on attitudes. The findings of these studies varied. One showed no change while the other found a significant positive change in attitude. In comparing the studies it was noted that the study which was successful in initiating a positive change in attitude had a well-structured, treatment and was done in a manner that allowed the role player to observe the reaction of the non-disabled person. The ability to make the role playing as realisitic as possible is an important factor in order for this technique to be successful.

The literature about the use of group discussions suggests that this approach must be used with great caution.

Donaldson and Martinson (1977) found that the use of a structured panel discussion can be effective providing that the disabled individuals are of approximately the same age and have good presentation skills. However, Donaldson (1980) indicates that in studies in which there were unstructured group discussions, there can actually be a negative shifting of the participants' attitudes.

From the literature on inservice training, it is noted that the first step is a needs assessment of teachers. After this assessment, the research indicated that the best method of presenting the inservice is a combination of a number of techniques, such as lectures, workshops, and demonstrations. Drummer and Windham (1982) noted that research findings indicate that workshops which are conducted by the peers of participants are effective. As for the changing of teacher attitudes, a number of techniques may be effective. These same methods, if they are not structured properly, may be ineffective; or they may even result in a shift to a more negative attitude.

Schultz (1982) found that regular elementary teachers felt a lack of expertise in accounting for individual differences. Other areas of concern identified by the teachers of regular schools in this study were the lack of skills, knowledge and clarity about their roles and responsibilities. These concerns can be addressed through inservice training.

The use of inservice education is valuable in preparing and updating teachers who are already in the field. In order for inservices to be effective they should be well-structured. Inservices not only should provide information about disabled individuals but also allow exposure to them. Perferably the disabled individuals should be of similar age and status. Appropriate inservice training may reduce potential barriers to mainstreaming and therefore should receive attention in the study of school physical education.

This literature indicates the importance of inservice education for teachers involved in mainstreamed situations. There has been a good deal of information developed regarding adapted physical education over the last 5 years. It would be useful to assess if teachers have participated in any workshops or seminars in adapted physical education within the past 5 years. In addition, the literature on inservice training points out the importance of exposure to disabled students. This factor should be examined when assessing mainstreaming.

Summary

The review of literature suggests that there is very little data available that describe the extent of mainstreaming in Canadian or American school systems. Furthermore, virtually no research exists that identifies which factors in and outside of the mainstream context

actually facilitate, or act as barriers to, the integrative process. It makes sense that facilities, teacher attitudes, professional preparation, and resources will be factors that interact with the nature of students' disabilities to influence the success of mainstreaming in the schools. These factors have received some attention in the literature. Both descriptive studies, and experimental studies have been reviewed, but they are fragmented, scattered in focus, and generally of little help in identifying the primary or seconday influences on successful mainstreaming. The literature, however, does alert investigators to pieces of data that may be of significance. Teacher attitudes to the disabled, preservice and inservice preparation, previous exposure to disabling conditions, and perceived comptence of the teacher are factors that are assumed in the literature to be related to the success of mainstreaming. As such they deserve attention.

Chapter III

Methodology

The purpose of this study was to investigate, across Canada, the mainstreaming of students with physical disabilities into physical education. As a result of the geographic distance to be covered and the special population to be investigated the use of questionnaires were used to gather data. This chapter examines the research instrument used, the sample chosen, and the methods and procedures used in conducting this study.

Research Instrument

The research instrument for this study consisted of two self-administered questionnaires, one of which was designed for administrators of the schools, and the other which was designed for teachers who instruct physical education. It was necessary to develop two questionnaires as certain information which was needed could be only obtained from administrators while other information could only be obtained from teachers.

For a number of reasons, the questionnaire format was chosen as the best method of investigating mainstreaming. Since this was a Canada-wide study, the use of questionnaires was the most feasible in terms of cost and coverage. Because of the specific population that was of interest, an over sampling was done. It was decided that since the incidence of physically disabled students in the

general school population is small, a large sample of schools was needed in order to insure that enough mainstreamed schools would be sampled.

The use of survey research has a number advantages in that the anonymity of the respondent can be guaranteed and therefore may elicit more accurate information about the respondent's feelings or thoughts. (MaCallon, E. and McGray, 1975). Questionnaires can also allow for respondents to spend as much time as they wish; this factor may evoke more thoughtful answers. Through the use of a properly constructed questionnaire, the information obtained is more comparable than information obtained through interviews in that each respondent receives the same question phrased in exactly the same way. Besides, the final analysis of data can be done much more efficiently for large sample sizes provided the questionnaire has been properly designed in the initial stages of development.

A properly developed questionnaire allows the results to be put on scan sheets which can be inputed automatically into a computer. Once the results are inputed the data can be analyzed fairly easily through various computer statistical packages.

There are, however, a number of disadvantages to the use of the surveys in that the investigator has no opportunity to motivate the respondents to complete the questions to the best of their abilities. Questionnaires also provide no opportunity for the respondents to clarify

questions with which they may have difficulty. Additionally, a major difficulty often associated with the use of questionnaires is getting a good return. From weighing the advantages against the disadvantages of questionnaire use, it was clear that this was the best method for this study. A number of things were also done to overcome the above-mentioned disadvantages. This included a cover letter explaining the need for the study and explaining why the respondents' input was necessary, and a well-designed questionnaire which was relatively easy to answer. In addition, two separate follow-ups were sent to schools. The use of these techniques are described later in this Chapter.

As a result of this study being part of a larger study a number of resources and procedures were used in the development of the questionnaires. The first step in the questionnaire development was the identification of key areas of concern regarding mainstreaming in physical education. A steering committee of eight people, all of whom had experience in working with individuals having physical disabilities, was formed. Its purpose was to identify the major factors that exist in elementary and secondary schools that may affect mainstreaming. The following is a list of major factors that were identified by this committee:

1. attitude of teachers,
2. knowledge or professional preparation
3. availability of educational materials and knowledgeable consultants,

4. availability of aids and special programs,
5. facility and architectural barriers,
6. nature of the physical activities,
7. availability of suitable equipment.

The second step involved the development of questions by two investigators and a consultant for each of the areas identified. Once the questions were developed they were screened by the steering committee. From their feedback the questions and instructions were further refined.

The third step of the questionnaire construction involved the evaluation of the questionnaire by a group of people across Canada. This group acted as provincial coordinators for the study, and all had extensive experience with physically disabled individuals. The provincial coordinators were asked to evaluate the survey questions which had been developed. They were requested also to list any other factors that might prevent successful mainstreaming in schools. Once the input from the provincial coordinators was received, the questions were further revised.

Step four consisted of a pretest conducted in schools administered by the Edmonton Public School Board. Twelve schools were selected, six of which had students with physical disabilities attending them, and six of which did not have such students. These schools were also chosen on the basis of grade level: four elementary schools (grades 1 to 6), four junior high schools (grades 7 to 9), and four

senior high schools (grades 10 to 12). The selection of the specific schools chosen was at the discretion of the School Board. The administrators and teachers selected from each school were asked to complete their respective questionnaires, and to give feedback on the following:

1. clarity of instructions,
2. clarity of questions,
3. questions which should be added,
4. questions which should be omitted,
5. length of questionnaire.

Responses were obtained from all the schools selected for this pretest. From the feedback obtained from these administrators and teachers, further revisions were made and the final copies of the questionnaires were produced. These revisions included the addition of a definition for regular school. It was necessary to include in this definition that a regular school included both academic and vocational schools. A number of questions were revised in terms of clarity. Overall, the evaluations by administrators and teachers were very positive toward the questionnaires.

Description of Research Instruments

The final research instruments consisted of a four-page administrator's questionnaire consisting of thirteen questions (see Appendix A), and an eight-page teacher's questionnaire consisting of twenty-one questions (see Appendix B). The length and the number of responses required

by each of these instruments falls within the acceptable range according to Dillman (1977). All but one of the questions were pretested.

The question developed to determine the level of participation of students in physical education classes was included even though it was untested. The questions developed were closed ended to help facilitate data processing and to prevent differences in individual interpretations of questions by coders. Although the questions developed were closed ended, many were phrased so the respondent could identify all possible responses. For certain questions, allowances were made to distinguish between a respondent not knowing the information and his (her) failure to answer the question.

As a result of the variety of information sought, two different scales were used. A battery of attitude questions was developed which used a four-point Likert Scale. The four-point scale was chosen in an attempt to force the respondents to make a stand on the issues stated. McGraw and Watson (1976) note that using a four-point Likert scale alleviates the response set bias of respondents who tend to give neutral responses. However, the four point scale does cause polarity.

The other scale was developed to determine the level of participation of students in physical education classes. The single item indicator scale listed various activities, and respondents were asked to indicate their choice from five

possible kinds of participation by disabled students.

Validity and Reliability

The instruments developed were validated mainly through the use of face validity. Kidder (1976, p. 132) stated, "face validity is evaluated by a group of judges, sometimes experts, who read or look at a measuring technique and decide whether in their opinion it measures what its name suggests".

For this study, the key issues related to mainstreaming were identified by a steering committee. This committee was composed of eight individuals, all of whom had had experience in dealing with persons who had physical disabilities and who were in educational settings. It not only identified the key issues but also provided feedback regarding the two questionnaires which were developed to investigate the issues.

A group of individuals from across Canada were approached to act as provincial coordinators. All had extensive experience in working with the physically disabled. These individuals provided feedback on the questionnaires and identified any other key issues, particularly with respect to mainstreaming in their particular provinces. From this feedback the questions and directions were further refined.

After the questions were revised and clarified, the questionnaires were again tested for face validity, this

time by groups of administrators and teachers from various types and levels of schools across Canada. Their input was used to refine further the test instruments. Generally, the groups indicated that overall the test instruments were valid and dealt with the key issues.

As a result of the tight time lines required by Fitness and Amateur Sport to complete this study, no test-retest method was used to determine the reliability of the test instruments.

Sampling Frame

The sample for this study consisted of schools at the primary, elementary, junior high school and senior high school levels. The sampling frame used was provincial school lists which were obtained from the Departments of Education in each province. Two questionnaires were sent to each school sampled, one of which was to be filled out by an administrator and the other by a teacher who was involved in instructing physical education. The administrator was asked in a cover letter to choose one teacher in the school in the following order of preference:

1. Any teacher who instructs physical education to a class which contains both physical y disabled and non disabled students.
2. A physical education teacher.
3. A classroom teacher who teaches physical education.
4. Any teacher who instructs physical education to only

physically disabled students.

This order of preference was requested as it was felt that the richest information regarding mainstreaming would be obtained from physical education teachers who had students with physical disabilities presently in their classes. Further it was determined the most valuable information from non-mainstreamed schools would be obtained firstly from teachers who are responsible mainly for teaching physical education in these schools and secondly from classroom teachers who teach physical education. In addition, the category of any teacher who instructs physical education to only physically disabled students was included to solicit input from special schools for disabled students.

Sampling Method

The sampling method used was a stratified, systematic, disproportional sample with a random start (Babbie, 1977). The initial intent had been to sample randomly from those schools in Canada which had mainstreaming taking place. However, it was quickly discovered that there was no mechanism in place which would allow for identification of mainstreamed schools. As a result, a sample had to be chosen from all the schools across Canada regardless of whether or not mainstreaming was taking place in these schools.

The schools were stratified according to province for two major reasons. First, education is a provincial responsibility which results in each province having its own

policy or guidelines about mainstreaming. Therefore the differences in provincial guidelines regarding mainsteaming could have an influence on the degree of integration taking place. While provincial differences were not examined in this thesis, it was felt that future analysis might include an examination of this factor. The second reason for stratifying by province was that it would ensure representation from every province. The schools were further stratified within each province according to English and French schools. This was done so that schools would receive questionnaires in the language of their choice.

The sample chosen was disproportional by province as a result of setting a minimum cell size. There is a great range among the provinces in the number of schools that each contains. The range is from seventy-two schools in Prince Edward Island to over four thousand schools in Ontario. In order to increase the likelihood of mainstreamed schools being chosen, the minimum cell size was set according to the total number of schools in Prince Edward Island. The minimum cell size was further reduced to seventy-one schools since it was discovered that two schools in Prince Edward Island had the same administrator. In order to have an adequate sample from the other provinces, they were sampled on a percentage basis. Ten percent of schools were sampled from British Columbia, Alberta, Saskatchewan, Manitoba, Ontario and Quebec. In the provinces of New Brunswick, Nova Scotia and Newfoundland a fifteen percent sample was taken so that

the minimum cell size requirement was met. In total, 1556 schools from across Canada were surveyed (see Table 1). This sample size was deemed reasonable on the basis of being large enough to obtain schools that would have mainstreaming taking place and yet still being economically feasible.

Table 1

Schools Sampled

Province	%	English No.	French No.	Total No.
B.C.	10	159		159
Alta.	10	153		153
Sask.	10	100		100
Man.	10	84		84
Ont.	10	419	22	441
Que.	10	42	224	266
N.B.	15	60	33	93
N.S.	15	93		93
P.E.I.	100	71		71
Nfld.	15	96		96
Total		1277	279	1556

From the lists of schools which had been obtained for each province it was determined that systematic sampling was the most feasible in terms of time and money. According to Babbie (1979), systematic sampling is usually used in place of simple random sampling if an accurate list of elements is present.

There were some initial concerns that systematic sampling might result in a bias occurring. The provincial lists obtained were ordered either alphabetically or geographically. In lists which were arranged alphabetically it was determined that systematic sampling would be an advantage since it would ensure representation from both Catholic and Protestant schools. In the case of lists arranged on a geographic basis, systematic sampling helps to ensure that both urban and rural schools are represented.

A random start for each province was used to select schools in each province. According to Babbie (1979), using a random start helps to ensure against possible human bias. Using this method for each province where a 10% sample was taken, the first school was chosen by randomly selecting a number between 1 and 10. The school having that number was then included in the sample plus every tenth school following it.

Research Methods and Procedures

A number of procedures were carried out in order to increase the response rate. A request was made to the Minister of Education in each province to provide a letter endorsing this study in his or her province. The Ministers of Education in the provinces of Saskatchewan, Manitoba, Ontario, and New Brunswick provided letters of support.

The exact reasons why all the Ministers of Education would not support this study are not known. However, from one province, the minister stated that he would not give approval to the study since it was up to the individual school boards to give approval. In another instance, one of the Ministers who had given tentative support to the study later changed his mind after receiving copies of the questionnaires. His reason for not providing a letter of support was that school district personnel were under considerable pressure in adjusting to a program of financial restraint. He wrote that it was an inappropriate time to introduce "yet another sensitive task".

Separate cover letters for the administrators and teachers were developed. These cover letters outlined what the study was about, why it was needed, and why their responses were important. These letters also ensured respondents of confidentiality of any information they provided.

A complete package was sent to each school selected by the sampling procedure. The mail-out package included:

1. administrator's cover letter (see Appendix A),
2. administrator's questionnaire (see Appendix A),
3. teacher's cover letter (see Appendix B),
4. teacher's questionnaire (see Appendix B),
5. minister's letters of support (see Appendix C),
6. stamped self addressed return envelope.

The implementation of this survey followed a design method recommended by Dillman(1977). It consisted of an initial mail-out and two separate follow ups.

One week after the initial mail-out, follow-up postcards were sent to all of the schools (see Appendix D). Dillman (1977) states that a one-week time span is the best for sending this follow-up as most people will remember the previous correspondence and still have it accessible. The follow-up postcard served three major purposes. First, it may have "jogged" the memory of those who had received the questionnaires but who had not returned them. Secondly, it thanked those who had already filled out the questionnaires and who had sent them back. Thirdly, it allowed those who had not received the original packages to mail back the postcard so that other packages could be mailed to them. In thirty one instances postcards were returned from schools and new mail-out packages were sent to them.

The second follow-up was conducted three weeks later. It consisted of sending follow up letters (see Appendix E) along with mail-out packages to those schools in which the administrator and/or the teacher had not returned the

questionnaires. The second mail-out was made possible by machine-coding each of the questionnaires in the first mail-out. As the questionnaires were returned, a record of the returning schools was kept. In the second follow-up, the questionnaires were again coded, this time by hand. This was done to ensure that double returns by either the admininstator or the teacher would not be included. in the study. In a number of instances double returns were recieved and they were discarded.

Coding of Data

As a result of the large sample size in this study, a number of persons had to be hired to code the information obtained on the questionnaires. To ensure that the coding would be consistent between coders, a number of steps were taken. A code book (see Appendix E) was developed. It gave general instructions to the coders on procedures to follow in coding the questionnaires, and it gave specific directions for the coding of each separate question. In addition, each of the coders were trained regarding proper procedures for completing the scan sheets. As well, random checks were done by the investigator for each coder.

After all the questionnaires had been coded on scan sheets, they were entered into the computer. The raw data were analyzed then cleaned using the SPSSX and OSIRIS computer packages. Through the use of these programs, checks were done for completeness, wild codes, multivariate

consistency, and outliers.

Data Analysis

The data were analyzed using the SPSSX suite of programs. The frequency program was run for all questions. Where it appeared warranted by the literature, comparisions were made between teachers who had been exposed to physically disabled students and those who had not been exposed. This was done by using the crosstabs program. For the battery of attitude questions, a chi square test was done to determine if there was a significant difference between those teachers who had exposure to physically disabled students and those who had not.

Chapter IV

Results

INFORMATION FROM ALL SCHOOLS

The sample consisted of 1556 schools from across Canada. From this sample six of the mail out packages were returned due either to an incorrect mailing address or to a school closure. This is a relatively small error when a mailing list is used as a sampling frame.

The response rate from administrators was 72.9% (1134), and the response rate from teachers instructing physical education was 71.1% (1107) (See Table 2). Babbie (1980) indicates that a response rate of over 70% is considered to be very good for mail-out surveys. The high response rates for this study are attributed to a number of factors. These include the use of a three-step implementation process, the use of Ministers' letters endorsing the study, and the sampling of a homogeneous group who are well-educated.

The effect of the three-step implementation process is clear in the comparison of the return rates resulting from the first and second mail-outs. The response rate for administrators from the initial mail-out and the follow-up postcard resulted in a return rate of 57.8%. An additional return of 15.1% was received from the second mail-out. The final result was an overall return rate of 72.9% from the administrators.

The response rate from teachers for the initial mail-out and follow-up postcard was 56.6%. This response rate was increased by an additional 14.4% from the second mail-out. This resulted in the overall return rate of 71.0% from teachers.

It is noted that the provinces of Manitoba and Ontario had the highest return rates for both administrators and teachers (see Table 2). In these provinces a letter from the respective Provincial Ministries of Education endorsing this study had been sent out as part of the mail-out package. The response rate from Quebec is noticeably lower than those of the other provinces. A number of factors could have affected the return rate from Quebec. As a result of translation difficulties, the mail-out packages were sent to French language schools three weeks later than those sent to English language schools. The English mail-out packages were sent in late April, while the French mail-out packages were sent in mid-May. The end of the school year is a busy time for both school administrators and teachers. Therefore, the fact that the French language schools received the questionnaire later in the school year may have contributed to their lower response rate. The lack of a letter from the Ministry of Education in Quebec may also have affected the number of returns. Another factor is that the quality of print used for the French questionnaires (see Appendix G) was not as good as that used for the English questionnaires. This was a result of a special typewriter being used to

Table 2

Response Rates from Administrators (A) and Teachers (T) by Province

Province	Sample Size	Freq A	Freq T	Rate A	Rate T
British Columbia	159	117	115	73.6%	72.3%
Alberta	153	116	113	75.8%	73.9%
Saskatchewan	100	73	72	73.0%	72.0%
Manitoba	84	65	63	77.4%	75.0%
Ontario	441	374	366	84.8%	83.0%
Quebec	266	146	140	54.9%	52.6%
New Brunswick	93	59	58	63.4%	62.3%
Nova Scotia	93	69	65	74.2%	69.9%
P. E. I.	71	53	54	74.6%	76.1%
Newfoundland	96	62	61	64.6%	63.5%
TOTAL	1556	1134	1107		

print the French questionnaires while a computer and printer were used for developing the English questionnaires. Dillman (1978) indicates that the appearance of the questionnaire can greatly influence response rate. The combination of these factors may have led to the noticeably lower response rate from Quebec..

Description of Sample

The sample included elementary schools, secondary schools, a combination of elementary and secondary schools, vocational schools, and special schools for the disabled. Schools which consisted of kindergarten through grade 6 were considered to be elementary schools and secondary schools were those which had any combination of grades 7 through 13. A total of 36.6% of the schools were elementary, 20.6% were secondary, 42.2% were both elementary and secondary, and less than 1% were vocational and special schools. Approximately half of the schools responding were located in a population center of less than 10,000, and approximately half were located in a population center of 10,000 or greater. These figures indicate that a good representation was obtained from all types of schools.

The size of these schools was classified according to student enrollment. It was found that approximately 30% had a student enrollment of less than 200, approximately 40% had an enrollment between 200 and 399 students, 20% had an enrollment of 400 to 599, and the remaining 10% of the

schools had student enrollment of 600 or greater. These results show that there was a good representation from schools of different sizes.

It was found that 34.1% of the administrators indicated that their schools had students with physical disabilities attending them. This seems to be an unusually large percentage. Kirk and Gallaghan (1983) and Haring (1982) indicate that the incidence of students with physical disabilities in the school population of the United States is somewhere between 0.3% and 0.5%. Further examination of the data for this thesis showed that 86.1% of the administrators from mainstreamed schools indicated that they had three or fewer students with physical disabilities attending. Therefore, although the number of schools having students with physical disabilities is large, the actual number of these students attending regular schools may not be particularly large.

It is important to note that in certain survey questions, the respondents were asked to circle all appropriate answers. Therefore, in some tables where the percentages are reported, they refer to the percentages of administrators and teachers that responded positively to that item. This may result in the total number of responses in that table exceeding the actual number of respondents. In other tables, administrators and teachers were asked to choose only the best answer to the question; this results in the frequencies equalling the total number of respondents.

In both the text and the tables all decimals have been rounded to the nearest tenth.

Environmental Barriers to Mainstreaming

Information regarding environmental conditions was sought from all administrators regardless of whether or not the school had students with physical disabilities. The administrators who were surveyed were asked to identify all types of conditions that might act as barriers for students with physical disabilities. These were broken down into indoor and outdoor conditions. Three indoor conditions were prevalent in over 40% of the schools (see Table 3). These were 'no wheelchair access to washroom cubicles', 'multi storied school with no elevator', and 'stairs, but no ramp, to enter school'. In addition, the conditions of 'stairs, but no ramp, to enter the gymnasium' and 'no wheelchair access to locker or shower rooms' were identified in approximately one-quarter of the schools. Only 17.9% of the school administrators felt their schools had no indoor conditions which would act as barriers to mainstreaming students with physical disabilities.

The most prevalent conditions identified as possible outdoor barriers to physical activity were the presence of steps or curbs to play areas (34.6%) (see Table 4). Further, 'soft surfaces for access to play areas' (26.9%) and 'no hard open surface for play' (17.8%) were identified as conditions that could act as barriers. Approximately

Table 3

Indoor Barriers to Mainstreaming

		Frequency*	Percent*
1.	Stairs, but no ramp, to enter school	489	34.1
2.	Multi-storied school with no elevator	524	46.2
3.	No wheelchair access to wash room cubicles	645	56.8
4.	Stairs, but no ramp, to enter gymnasium	275	24.3
5.	No wheelchair access to locker rooms or shower	327	28.8
6.	Other	95	8.4
7.	None	203	17.9

*Administrators were asked to identify all possible barriers.

Table 4

Outdoor Barriers to Mainstreaming

	Frequency*	Percent*
1. Steps or curbs to play areas	392	34.6
2. Soft surfaces for access to play areas	305	26.9
3. No hard open surfaces for play	202	17.8
4. Other	49	4.3
5. None	372	32.8

*Administrators were asked to identify all possible barriers.

one-third of the school administrators felt they had no outdoor conditions that would act as barriers to physical activity for disabled students.

The data on outdoor barriers make it evident that access to play areas in many schools is a problem for mainstreamed students.

Attitudes of Teachers Toward Mainstreaming

The attitudes of teachers toward mainstreaming were tested in a series of fifteen questions (see Table 5). The results from some of the questions indicated general agreement among teachers on some mainstreaming issues. Results from four questions in particular indicated that a large majority (85% or more) of the teachers were in agreement with the issues that were stated. These four issues were that students with physical disabilities can increase their physical fitness (98.5%), that they like physical education (91.7%), that they would benefit more from attending physical education rather than academic classes as substitutes (91.1%), and that they should be required to take physical education (88.4%). The other mainstreaming questions did not elicit such strong agreement by teachers. On four particular issues teachers were almost evenly split. These issues were that students with physical disabilities would, as follows: (a) benefit more from placement in special physical education classes, (b) present special medical concerns, (c) be difficult to assess in

Table 5

Attitudes of Teachers Toward Mainstreaming Students With Physical Disabilities

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
A) A physically disabled student should be required to take physical education.	39.4	49.0	9.1	2.3
b) In comparison to non-disabled students physically disabled children do not like physical education.	1.3	6.7	56.6	35.1
c) The physical fitness of the physically disabled student can be improved.	51.5	47.0	.6	.7
d) The safety of a physically disabled student is at risk in a physical education class.	3.9	27.6	54.8	12.2
e) It is difficult to assess the skills and abilities of a physically disabled student.	5.2	41.0	46.8	6.5
f) Physically disabled students would benefit more from attending academic classes than they would from attending physical education classes.	1.9	5.8	53.3	37.8
g) The safety of the non-disabled student is at risk if the physically disabled student participates in regular physical education classes.	1.8	14.4	58.6	24.3
h) Physically disabled students would benefit more from placement in special schools for disabled students only.	5.1	19.5	47.8	24.9
i) It is difficult for non-disabled students to benefit maximally when a physically disabled student is part of a physical education class.	3.4	22.2	52.4	20.9
j) It is difficult to choose activities that benefit both the physically disabled and non-disabled students in a physical education class.	12.2	55.3	27.2	4.2
k) I feel uneasy about dealing with special medical problems that may arise when a physically disabled student is participating.	7.5	45.3	38.0	8.3
l) I feel that disabled students need skill and fitness upgrading before they enter integrated physical education classes.	6.6	12.2	53.2	6.2
m) Physically disabled students need too much time and attention in a regular physical education class.	7.3	29.7	52.2	8.3
n) It is not the job of a regular physical education teacher to instruct physically disabled students.	4.7	14.4	60.2	18.6
o) Physically disabled students would benefit more from placement in special physical education classes for disabled students only rather than placement in regular physical education classes.	11.4	34.3	40.3	10.1

terms of skills and abilities, (d) need upgrading in fitness and skills before they are mainstreamed in physical education.

Two questions examined safety concerns in mainstreaming students in physical activities. It was the feeling of 67% of the teachers that the safety of the disabled student was at risk in a regular physical education class. In comparison, only 16.2% of the teachers felt that the safety of the non-disabled student was at risk in a mainstreamed physical education class.

The majority of physical educators felt it was their responsibility to instruct students with physical disabilities in their classes. However, a number of them were concerned with the degree of difficulty involved in teaching a mainstreamed class. A good percentage of the teachers (67.5%) felt that it was dificult to choose activities that would benefit both the disabled and the non-disabled students. Also, 46.2% of the teachers replied that it was difficult to assess the skills and abilities of a physically disabled student. It was the feeling of 37.0% of the teachers that students with physical disabilities take too much of the instructor's time and attention in a mainstreamed physical education class.

A number of questions examined the issues concerning the placement of students with physical disabilities. About one quarter of the teachers (24.6%) answered that physically disabled students would benefit more by being placed in

special schools for only the physically disabled. There was a noticeably higher percentage (45.7%) who felt that disabled students would benefit more from being placed in physical education classes designed especially for them than they would from being mainstreamed into regular physical education classes. It is interesting to note that only 7.7% of the teachers believed that disabled students would benefit more from attending an academic class than they would from attending a physical education class.

Using a chi square test a number of significant differences were found in comparing teachers who have experience teaching students with physical disablities to those teachers who have no experience (see Table 6). In terms of attitudes towards mainstreaming 13.8% more (31.7% compared to 17.9%) of teachers without experience felt that students with physical disabilities would benefit more from placement in special schools for disabled students only. In addition 11.6% more (25.0% compared to 13.4% of teachers without experience felt it was not the job of a regular physical education teacher to instruct physically disabled students. As well, 10.3% more of this group (52.5% compared to 42.2%) felt that physically disabled students would benefit more from placement in special physical education classes for disabled students only rather than from placement in regular physical education classes. A total of 85.6% of teachers without experience felt a physically disabled student should be required to take physical

Table 6

Differences in Attitudes Between Teachers Experienced with Students with Physical Disabilities and Teachers Without Experience

	EXPERIENCE		NO EXPERIENCE		
	Agreement	Disagreement	Agreement	Disagreement	SIG
A) A physically disabled student should be required to take physical education.	91.8	82.0	85.6	14.4	.05
b) In comparison to non-disabled students physically disabled children do not like physical education.	7.2	92.8	8.8	91.2	N.S.
c) The physical fitness of the physically disabled student can be improved.	99.0	1.0	98.2	1.8	N.S.
d) The safety of a physically disabled student is at risk in a physical education class.	29.9	70.1	34.0	66.0	N.S.
e) It is difficult to assess the skills and abilities of a physically disabled student.	46.9	53.1	46.0	54.0	N.S.
f) Physically disabled students would benefit more from attending academic classes than they would from attending physical education classes.	6.1	93.9	9.6	90.4	.05
g) The safety of the non-disabled student is at risk if the physically disabled student participates in regular physical education classes.	13.7	86.3	18.9	81.1	.05
h) Physically disabled students would benefit more from placement in special schools for disabled students only.	17.9	82.1	31.7	68.3	.001
i) It is difficult for non-disabled students to benefit maximally when a physically disabled student is part of a physical education class.	23.7	76.3	27.6	72.4	N.S.
j) It is difficult to choose activities that benefit both the physically disabled and non-disabled students in a physical education class.	65.3	34.7	70.8	29.2	N.S.
k) I feel uneasy about dealing with special medical problems that may arise when a physically disabled student is participating.	44.6	55.4	61.1	38.9	.001
l) I feel that disabled students need skill and fitness upgrading before they enter integrated physical education classes.	35.4	64.6	43.6	56.4	.05
m) Physically disabled students need too much time and attention in a regular physical education class.	33.3	66.7	42.2	57.8	.05
n) It is not the job of a regular physical education teacher to instruct physically disabled students.	13.4	86.6	25.0	75.0	.001
o) Physically disabled students would benefit more from placement in special physical education classes for disabled students only rather than placement in regular physical education classes.	42.2	57.8	52.5	47.5	.05

education while 91.8% of teachers with experience felt this way. As well, 9.6% of teachers without experience felt that physically disabled students would benefit more from attending academic classes than they would from attending physical education classes while 6.1% of teachers with experience felt this way.

In terms of safety concerns 16.5% more (61.1% compared to 44.6%) of teachers without experience felt uneasy about dealing with special medical problems that may arise when a physically disabled student is participating. In addition, 5.2% more (18.9% compared to 13.7%) of teachers without experience felt that the safety of the non-disabled student is at risk if a physically disabled student participates in regular physical education.

Two other areas concerned with having physically disabled students in physical education classes were noted as being significantly different on the basis of experience. A total of 8.9% more (42.2% compared to 33.3%) of teachers without experience felt that disabled students need too much time and attention. As well, 8.2% more (43.6% compared to 35.4%) of this group felt that disabled students need skill and fitness upgrading before they enter integrated physical education classes.

INFORMATION FROM MAINSTREAMED SCHOOLS ONLY

Data analysis for the following section was based on the responses from a total of 336 teachers who were involved in instructing students with physical disabilities. For the purposes of this study, students with physical disabilities were considered to be to any persons who had permanent or long-term impairment of mobility. It did not include individuals recovering from temporary medical conditions (e.g. fractures), individuals with hearing impairment, with visual impairment, with mental handicaps, or with physical disabilities which did not impede mobility.

Description of Mainsteamed Students

The mobility of students with physical disabilities was examined with respect to any special equipment which had been used by the student in physical education (see Table 7). It was found that 34.7% of the teachers reported having students with physical disabilities who did not use any special equipment for mobility in physical education. The piece of equipment most often used for mobility was the manual wheelchair (18.3%). However, only 16.8% of these same teachers identified these wheelchairs as being specifically designed for physical activity

Approximately 14% of the teachers reported having students who used braces. Four other kinds of special mobility aids were used to a lesser extent by disabled students in physical education. These include cane or

Table 7

Mobility of Students With Physical Disabilities in Physical Education Classes

	Frequency*	Percent*
1. Braces	60	13.7%
2. Cane or Crutches	38	8.7%
3. Walker	31	7.1%
4. Artificial Limb	28	6.4%
5. Electric Wheelchair	30	6.8%
6. Manual Wheelchair	80	18.3%
7. Other (e.g., C.P. Trike)	19	4.3%
8. None Used	152	34.7%

*Teachers were asked to respond to all appropriate answers.

crutches, walker, electric wheelchair, and artificial limb.

Placement of Students with Physical Disabilities

It was found that 67.8% of the school administrators had students with physical disabilities placed in regular physical education classes. A further 10.1% had students who were placed in a special physical education class for disabled students only. In one case, a student with a physical disability was sent to a special physical education class in another school or agency. There is a significant

number of schools were physically disabled students do not attend physical education classes. In total, 21.8% of administrators reported that their students with physical disabilities attended academic classes or other activities instead of physical education (see Table 8). Teachers were asked to describe the nature of the participation of students with physical disabilities in their physical education classes. In cases where teachers had more than one student, they responded to all appropriate answers. Therefore, the resulting percentages reflects the number of respondents answering positively to each statement (see Table 9).

Approximately 20% of the teachers reported that students with physical disabilities participated in regular physical education classes and performed the same activities as the other students. The majority (67%) indicated that disabled students attended regular physical education classes and did some of the same activities as the other students. Furthermore, 8.6% reported that these students did attend but did not participate in physical education activities. An additional 1.2% of the teachers indicated that they had students with physical disabilities who did not attend physical education classes.

Table 8

Placement of Students with a Physical Disability

		Frequency*	Percent*
1.	Regular physical education class	308	67.8
2.	Special physical education class for disabled students in own school	46	10.1
3.	Special physical education class for disabled students offered in another school or agency	1	0.2%
4.	Academic classes in lieu of physical education classes	39	8.6%
5.	Other activities instead of physical education	60	13.2%

*Administrators were asked to respond to all types of placements in their schools.

Table 9

Participation of Mainstreamed Students in Physical Education Classes as Reported by Teachers

	Number of Responses	Percent of Respondents
1. Regular physical education - all activities	66	19.6%
2. Regular physical education - some activities	225	67.0%
3. Special physical education class (physically disabled only)	31	9.2%
4. Attends - no participation	29	8.6%
5. Does not attend	4	1.2%

*Teachers were asked to respond to all appropriate kinds of placement in their classes.

Specific Curriculum Activities

The level of participation by mainstreamed students was sought for activities which were identified as being offered as part of the physical education curriculum . From the list that was provided a number of activities were identified as having a high frequency of inclusion in the curriculum. They were aquatics, basketball, badminton, children's games, climbing activities, dance, fitness activities, floor hockey, football, gymnastics, outdoor skills, skating,

soccer, softball/baseball, track events, field events, and volleyball. All of these activities can be considered to be culturally normal in the school system, and therefore deserve special examination (see Table 10).

About half of the physical education teachers (49.5%) identified aquatics as an activity allowing for the greatest paticipation by the physically disabled student. Similarly, 48.4% of them designated children's games as being in that category. Further, 38.9% of the teachers chose hockey, 36.7% of them chose dance, and 34.1% chose fitness activities as allowing for full participation by students with physical disabilities.

Fitness activities were identified by 51.7% of the teachers as providing the physically disabled student with the opportunity to participate in a special, active role. Gymnastics were so designated by 48.1% of the teachers, and similarly, outdoor skills by 48.1% of them. A small percentage of teachers indicated a non-active role for the physically disabled student in most activities, with 10.3% of the techers identifying basketball and 9.1% of them identifying volleyball as the activities in which the physically disabled would be most apt to have a non-active role.

Four activities (bowling, handball, field hockey and weight lifting) were infrequently offered in schools across the nation, but were identified as activities that allowed for participation. Fifty percent or more of teachers whose

Table 10

Participation of Students with Physical Disabilities in Regular Physical Education Activities

ACTIVITY	DOES NOT PARTICIPATE	PARTICIPATES AS OBSERVER	PARTICIPATES IN SPECIAL NON-ACTIVE ROLE	PARTICIPATES IN SPECIAL ACTIVE ROLE	PARTICIPATES FULLY
Aquatics	25.7	4.0	1.0	19.8	49.5
Archery	58.1	2.3	7.0	9.3	20.9
Basketball	11.6	8.0	10.3	37.1	28.1
Badminton	16.1	6.3	4.2	39.2	29.4
Bowling	22.7	4.0	1.3	22.7	48.0
Childrens Games	3.6	3.6	4.0	38.3	48.4
Climbing Activities	18.1	10.1	5.0	37.2	27.1
Curling	52.2	8.7	2.2	21.7	10.9
Dance	15.1	5.4	5.4	34.9	36.7
Field Hockey	27.5	6.3	5.0	28.8	28.8
Fitness Activities	4.4	3.4	3.7	51.7	34.1
Floor Hockey	12.1	7.1	7.6	32.3	38.9
Football	35.1	16.0	8.5	22.3	17.0
Golf	68.4	2.6	-	13.2	13.2
Gymnastics	12.7	12.3	7.3	48.1	16.9
Handball	29.2	9.2	1.5	38.5	21.5
Ice Hockey	56.6	11.3	5.7	13.2	11.3
Outdoor Skills	11.9	6.9	4.4	48.1	27.5
Skating	40.2	14.8	5.7	18.9	18.9
Skiing	58.2	9.0	3.0	20.9	9.0
Soccer	10.7	11.7	6.8	39.0	29.8
Softball/Baseball	10.9	8.0	6.5	43.3	29.9
Tennis	52.9	3.9	5.9	21.6	15.7
Track Events	18.2	10.5	7.7	40.0	20.0
Field Events	17.8	11.0	8.4	40.3	20.4
Volleyball	15.6	6.5	9.1	37.1	29.6
Weight Lifting	40.9	4.5	3.0	24.2	25.8
Wrestling	48.4	12.5	4.7	15.6	17.2

schools offered these activities indicated that disabled students could participate fully or in a special role. In all other activities, which were offered infrequently in schools, the majority of students with physical disabilities either did not participate or participated only as observers.

Resources Available for Mainstreaming in Physical Education

When investigating mainstreaming in physical education it is important to examine the resources which are available to the teachers. These resources can be either human or material, or both. Teachers responses indicated that 23.6% had paid support personnel available, 4.5% had volunteer personnel available, while 3.9% had both paid and volunteer support personnel at hand. The majority (67.9%) had no support personnel to help them in their mainstreamed physical education classes.

The availability of consultants in physical education who could be of help to teachers with mainstreamed students was also investigated. It was found that physical education teachers in 36.8% of the schools were aware of such a resource while 38.6% of the teachers indicated that no such consultants were available. A large number of physical education teachers (24.6%) did not know whether there were any consultants to aid them in mainstreamed physical education classes.

It was found that 51.2% of the teachers had no program materials available which could assist them in providing a program for students with physical disabilities; and that 26.2% of the teachers were unaware of any program materials which could assist them in mainstreaming students with physical disabilities.

Of the administrators who had students with physical disabilities in their school, 44.6% had received some type of special funds to help in mainstreaming such students (see Table 11). The special funds received were used mainly for modifying facilities and for hiring support personnel. Only a small percentage (4.2%) of administrators reported receiving funds for the inservice training of teachers.

Table 11

Percentage of Schools Receiving Special Funds for Mainstreaming (N=397)

	Frequency*	Percent*
1. For modifying facilities	96	24.2
2. For purchasing special equipment for physically disabled	39	9.8
3. For support personnel for physically disabled	98	24.7
4. For inservice training of teachers of physically disabled	17	4.2
5. Other	18	4.5
6. No funds received	220	55.4

*Administrators were asked to identify all types of special funds for mainstreaming.

Chapter V

Discussion

The results of this study indicate that mainstreaming of students with physical disabilities is taking place in a large number of schools across Canada. Over one third of the administrators (34.1%) indicated that their schools had students with physical disabilities attending them. Almost half of the teachers surveyed had taught physical education to students with physical disabilities at some time in their teaching careers. The issues associated with mainstreaming are therefore widespread and require close investigation.

The results show that there are a number of barriers present in the school system which the literature suggests inhibits mainstreaming. Some of these barriers such as environmental barriers and professional preparation are easily identified. Other barriers such as attitudes and the nature of physical activities may be more subtle in their influence on mainstreaming.

Environmental Barriers

It is clear from this study that most existing school facilities across Canada act as barriers to mainstreaming. In other words, unlike non-disabled students, students with physical disabilities have a severely limited choice of schools in which they can gain easy access to facilities. The data on indoor barriers make it evident that there are barriers not only to entering schools but also to gaining

access to certain areas within schools such as gymnasia. These barriers can prevent the physically handicapped students from participating in programs such as physical education.

Outdoor barriers are evident in a majority of schools. Although material has been written about public access to and within buildings, little has been written about access to outdoor facilities such as playgrounds and running tracks. Awareness of these as barriers to mainstreaming needs to be increased so that public attention is directed to all areas of a student's participation in school.

When the decision to mainstream is made it is important that the means for overcoming these barriers is considered. An evaluation of both indoor and outdoor facilities should be conducted prior to mainstreaming. Otherwise disabled students may find themselves "mainstreamed" but without access to facilities available to the other students. If barriers are identified either they should be removed, or as an alternative, the disabled student should be placed in a school more suited to his/her needs. An alternative placement may be more feasible in certain cases where extensive renovations are required, e.g. mainstreaming students in wheelchairs in a multi-storied school which has no elevator. Regardless of the schools chosen for mainstreaming, the majority of them will require some renovations.

No data were collected to determine the age of schools in which administrators had reported the existence of indoor and outdoor barriers. Further study is needed to determine if new schools are free of achitectural barriers for mainstreamed students. If new schools are not barrier-free, then there is a need for school boards to be made aware of possible barriers so that they can take them into consideration in the planning of future schools in their jurisdictions.

Teacher Attitudes Toward Mainstreaming

In the literature, attitudes of teachers were identified as important in successful integration of disabled students. The findings indicate that attitudes toward mainstreaming may be related to a number of different factors. Two of these factors are the type of educational setting involved and the background of the teacher with respect to exposure to disabled individuals.

Two general questions were asked about mainstreaming. One dealt with the question of mainstreaming in education, and the other one examined more specifically mainstreaming in physical education. It was found that only one quarter of the teachers (24.6%) felt that students with physical disabilities would benefit more from placement in special schools for disabled students only. However, almost half of the teachers (45.7%) felt that students with physical disabilities would benefit more from placement in special

physical education classes for disabled students only. It is clear that although most teachers are in favour of mainstreaming in education, there are a significant number of teachers who question the appropriateness of integration in physical education. This variation in teacher attitudes toward mainstreaming may be reasonable when the differences between the two environments are examined. The main difference is that the very nature of physical education places a large emphasis on the need for mobility by students. Moblility is not a prominent factor in classroom performance, and the presence of wheelchairs and crutches does not influence the performance of other students in classroom tasks. The nature of physical activity may account for a large portion of the variance between teacher attitudes towards mainstreaming in general and those toward integration specifically in physical education. Overall attitudes toward mainstreaming are quite positive. However, it is noted that there is a significant difference between teachers who had experience instructing students with physical disabilities and those who had not (see Table 7). Thirteen point six percent more teachers without this experience said that students with physical disabilities would benefit more from placement in special schools for the disabled; and 9.0% more of these teachers felt that students with physical disabilities would benefit more from placement in special physical education classes rather than from placement in regular physical education classes.

These results indicate that a less positive attitude towards mainstreaming may be held by some teachers who have not been exposed to students with physical disabilities. Studies by Naor and Milgram (1980) and Stanche, Haines and Van Hestern (1982) found that exposure to individuals with disabilities during preservice practicum courses had a positive effect on teacher attitudes toward mainstreaming, provided these experiences took place in controlled settings. It is noted that these changes may not have occurred to the same extent in uncontrolled environments. In other words, mere exposure may not be enough to produce positive attitudes. It is not known whether the teachers in the present study experienced initial exposure in controlled or uncontrolled environments. Based on the current data, it would be unwise to suggest that mere exposure in an uncontrolled environment will result in positive attitudes. It is possible that teachers with positive attitudes were more willing to accept disabled students into their classes. That is to say that the attitude differences may have predisposed them to the experience of mainstreaming.

Three questions examined the teacher's perceived benefit of physical education for students with physical disabilities. The majority of teachers felt that students with physical disabilities liked taking physical education (91.7%), that they would not benefit more from spending their time in academic classes (91.1%), and that they should be required to take physical education (88.4%). From these

responses, it is seen that the vast majority of physical education teachers recognize the importance of physical education for students with physical disabilities. It was found, in regard to the first two issues, that there was no significant difference between teachers who had experience in instructing students with physical disabilities and those who had not had such experience. But there is a significant difference between these groups in respect to physical education being required for students with physical disabilities. More teachers without exposure to disabled students (6.2%) felt that physical education should not be required for students with physical disabilities; and 3.5% more of this group stated that they felt students with physical disabilities would benefit more from attending academic classes than from attending physical education classes. Both of these comparisons indicate that the exposure to students with physical disabilities is positively related to teacher attitudes toward mainstreaming. Other factors, such as differences in professional preparation and the availability of support resources may also contribute to the variance between these two groups.

Well over half of the teachers (63.5%) with exposure to students with physical disabilities and those teachers without exposure (59.4%) stated that they did not feel there was a need for skill and fitness upgrading of students with physical disabilities before they were mainstreamed into

physical education classes. This is a surprisingly high percentage. The concept of upgrading skills has been pointed out by Hutchinson and Lord (1979) as a crucial step for successful integration in recreation. They, however, were more concerned with the upgrading of personal-social skills rather than with the physical skills of disabled individuals. Because the concept of skill upgrading has been largely associated with the mentally handicapped, it may be seen as having little relevance for the physically disabled. Also, the severity of the mobility problems may make skill upgrading a relatively insignificant issue to most teachers. It is possible that the skill acquisition goals of physical education are seen as secondary for this population since much of the literature in the past decade has focused largely on participation for fun and feelings of self-satisfaction for this group.

Two questions examined the perceived risk to safety for students in a mainstreamed physical education class. Approximately 32% of the teachers saw the safety of students with physical disabilities being at risk. On the other hand only 17% of the teachers felt that the safety of the non-disabled student was at risk in a mainstreamed class. As would be expected, there is more concern expressed by teachers for the safety of disabled students than for the safety of non-disabled students.

There was a significant difference in opinion about the risk to non-disabled student between teachers who had been

exposed to students with physical disabilities and those who had not been exposed to them. A total of 4.9% more of the latter teachers felt that the safety of the non-disabled student was at risk in mainstreamed physical education classes. This increase in concern for the non-disabled student may be alleviated once the teacher is exposed to students with physical disabilities. Firth and Edwards (1981) state that teacher interaction with students with physical disabilities tends to alter certain perceptions of teachers working with these students in a mainstreamed environment. They found that 37 % of the teachers who had no experience with disabled students were concerned with the risk of injury to these children, while 25% of the teachers who had had experience with such individuals were similarly concerned. The fear for the safety of children with physical disabilities may be justified in some cases, but in others it may be due to the child being perceived by the teacher as sick or as an object of pity. This can lead the teacher to being overprotective of such students. In turn, this may result in teachers excluding these students from activities in which they could participate.

It was the feeling of 78.8% of the teachers that the job of a regular physical education teacher includes instructing students with physical disabilities. In spite of this, a number of difficulties associated with mainstreaming were identified. The majority of teachers (67.5%) felt that it was difficult to choose activities that benefit both

disabled and non-disabled students. There was no significant difference on this issue between teachers who had exposure to students with physical disabilities and those who had not.

There were 52.8% of the teachers who felt uneasy about dealing with special medical problems that could arise. There was a significant difference depending on whether or not teachers had experience in instructing students with physical disabilities. A total of 16.6% more of teachers without experience were concerned with special medical problems. This finding support the study by Firth and Edwards (1981) who found that teachers who had no experience with students with physical disabilities were significantly more concerned about the responsibility for administering medication than were teachers who had had experience with these individuals.

A total of 46.2% of teachers felt that it was difficult to assess the skills and abilities of students with physical disabilities. There was no significant difference between teachers who had exposure to students with physical disabilities and those who had none.

The results regarding the difficulty in choosing activities, feeling unease about medical problems, and the difficulty in assessing skills and abilities of students with physical disabilities indicate that these attitudes may exist as barriers to successful mainstreaming. Teachers who have mainstreamed students may benefit from assistance of

specialized adapted physical education consultants to reduce the effects of these barriers. They could provide help in the areas of assessment, in adapting activities, and in providing information on the kinds of disabilities and medical problems associated with them. Consultants would need to have specialized training in adapted physical education so that they could provide assistance for students with a wide range of disabilities and with a wide range of ages. Furthermore, since the nature of these students' disabilities can be so diverse, these consultants would be best utilized at the local school board level. This would allow them to provide ongoing consultation with teachers in individual schools.

It was found that 37.0% of the teachers felt that disabled students require too much time and attention in a mainstreamed physical education class. A significant difference was found between teachers, depending on whether or not they had had exposure to students with physical disabilities. More of the teachers without exposure (8.6%) felt that these students would require too much time and attention. These findings support the study by Firth and Edwards (1981) who found that one of the major concerns of teachers was the disproportional amount of time required to attend to the physically disabled student. They also found that significantly more teachers who had no exposure to students with physical disabilities were concerned with the amount of time that would be needed for mainstreaming such

students. These studies emphasize the need for support personnel in cases where students with disabilities are present and who require an abnormal amount of the teacher's time, or who require instruction on a one to one basis.

Although teachers recognize the importance of physical education for students with physical disabilities, they did express some concern about the effects of mainstreaming for the non-disabled students. A total of 25.6% of the teachers felt it was difficult for the non-disabled to benefit maximally when students with physical disabilities were part of the regular physical education class. There could be a number of contributing factors to this feeling such as the disabled student taking too much of the instructor's time and attention, and the difficulty in choosing activities that benefit both types of students. The scope of this study did not include the ability to examine the reasons why teachers felt the non-disabled students could not benefit maximally in a mainstreamed class.

Teacher attitudes may act as barriers to the successful integration of physically disabled students into physical education. Some of these attitudes may be based on incomplete or inaccurate information, while others may be justified on the basis of experience. The issue is not a simple one, and the actual effects of these attitudes or expectations on the success of the disabled student in the regular physical education class has not yet been assessed. It is possible that these attitudes act as barriers in cases

where successful integration is realistic, but it is possible also that these same attitudes may be justified in cases where there has not been 'intelligent' integration. If the latter is true, then these attitudes are safeguards for the student who is best placed in a segregated activity setting. In summary, the current data would suggest that feelings about the mainstreaming of disabled students are mixed on many issues.

Professional Preparation for Mainstreaming

A number of questions examined the professional preparation of physical education teachers. Although 47.5% of the teachers had taught physical education to students with physical disabilities at some time in their career, the majority of teachers (59.9%) felt they were inadequately prepared to do so. Of all the physical education teachers who responded, only 2.2% felt that they were well prepared. There was a significant difference between teachers who had experience instructing students with physical disabilities and those who had none. A total of 43.9% of the experienced teachers felt inadequately prepared to teach physical education to students with physical disabilities, while 74.2% of the inexperienced teachers felt inadequately prepared. These findings support the study by Gickling and Theobold (1975) who found that the vast majority of regular classroom teachers felt that they lacked the necessay skills to teach handicapped students. The findings also support the

study by Marston and Leslie (1983) who found that the vast majority of physical education teachers felt that colleges and universities were not adequately preparing them for instructing mainstreamed physical education classes.

In investigating the educational background of the physical education teachers, it was found that slightly more than half (52.5%) did not have a physical education (or equivalent) degree. It was further discovered 19.2% of the teachers instructing physical education had not taken any formal physical education courses. This noticeably high percentage may be in part due to the fact that the teaching of physical education in the primary grades is usually the responsibility of the generalist teacher. Luke (1983) found in a national survey of elementary teachers that for every province, with the exception of Quebec, the instructing of physical education in the primary grades (K - 3) was almost always the responsibility of the generalist classroom teacher. It is noted that in the current study almost one out of five teachers instructing physical education had not taken any formal courses in physical education. These teachers' feelings of unpreparedness may stem from their lack of knowledge in the field of physical education; they may feel unprepared to instruct physical education to a regular class let alone a mainstreamed class. In addition, the content of most physical education courses does not include material relevant to instructing students with physical disabilities. A set of courses designed

specifically to deal with mainstreamed students should be included in the physical education curriculum.

In examining teacher training in areas related to mainstreaming, it was found that 30.4% of the teachers instructing physical education had taken a university course which dealt with individuals with physical disabilities. These courses did not necessarily focus on physical education. In fact only 19% of the respondents had taken a course which dealt specifically with disabled individuals in physical education. This finding is similar to what Ersing (1974) found in a national survey of schools, agencies, and institutions with physical education programs for the handicapped in the United States. He found that only a minority of teachers (17%) were professionally prepared with either adapted physical education or corrective therapy courses. It is surprising that in the ten year period between these two studies the numbers have not increased substantially.

Most Canadian universities do not require adapted physical education or corrective therapy courses as part of the preservice programs for physical education teachers. A number of authors have noted that methods and practical courses dealing with disabled individuals have had positive effects on the attitudes of undergraduate students (Leyser, Abrams and Lyscomb, 1983, Noor and Milgram, 1980; Stance, Haines and Van Hestern, 1982). As a result of a lack of information about students with disabilities, as well as a

lack of exposure to these students, it is not surprising that a majority of teachers feel unprepared to teach physical education in a mainstreamed environment.

Of the teachers who had students with physical disabilities in their classes, only 15.6% had participated in any workshops or seminars in adapted physical education in the past five years. This is a small percentage considering that numerous researchers have identified inservice training as being essential for successful mainstreaming (Drummer & Windham, 1982; Gear & Gable, 1979; and Powers, 1983). The last five years has seen a tremendous growth in the area of adapted physical education. However, it is apparent that the information which has been developed about teaching students with disabilities has been disseminated to only a small number of teachers through inservice training.

In summary, it is hardly surprising that the majority of physical education teachers feel inadequately prepared to teach students with physical disabilities. There is clearly a lack of professional preparation for physical education teachers at both preservice and inservice levels. This lack of preparation is noticeable in terms of regular physical education, and is even more apparent in physical education for students with physical disabilities. The lack of information about individuals with physical disabilities as well as the lack of exposure to these individuals can greatly influence teacher attitudes and competencies in

working in a mainstreamed environment. Although the actual number of mainstreamed students may be small, the overall number of schools with these students is significant. This circumstance points to the need for a special delivery system for preparing teachers to handle the role of mainstreaming these students. Such a system needs to prepare both the teachers who are training to become regular physical education teachers and those teachers who are already in the field. This study indicates that there is a need to include courses in adapted physical education for regular education training programs, and at the same time, to provide individuals who are specialized in adapted physical education as support for teachers who are already in the field.

Mobility Aids

In physical education a primary prerequisite for participation in most activities is mobility. One of the major problems faced by most students with physical disabilities is limited mobility. This study found that the majority of disabled students (65.3%) required some type of aid for mobility in physical education. The most frequently used aid reported by teachers was the manual wheelchair (18.3%). However only a minority of these same teachers (16.8%) identified the wheelchairs as being specifically designed for physical activity.

In cases where wheelchairs are not specifically designed for physical activity, the ability of the disabled student to move with speed, to change direction quickly, to manipulate objects, and to reach and stretch is severely hampered. The availability of wheelchairs that are specifically designed for physical activity and the availability of other special equipment is essential if integration is to be successful.

The type of mobility aid can greatly affect the degree to which students can participate in certain activities. In some activities these aids may not be needed, or they may only minimally interfere with performance. For example, Arnie Bolt, an amputee who has only one leg, has consistently jumped 1.8 meters in competition without the use of his mobility aid. On the other hand, a mobility aid such as a brace may greatly hamper an individual's performance or even prevent his or her participation in the high jump.

Placement of Mainstreamed Students

Wolfensberger (1972) indicates that there are two kinds of integration. These are physical integration and social integration. Physical integration refers to physical placement of handicapped individuals in an environment; social integration refers to actual interactions between the handicapped and their able-bodied peers. If students are placed in schools and are not socially integrated, then the

benefits for the mainstreamed students are very limited. In fact, this kind of placement may even have a negative effect on the self concepts of these students, and consequently on their education.

Only 1.2% of the teachers indicated that they had students with physical disabilities who did not attend physical education. This latter figure is conservative compared to the 21.8% of administrators who reported that there were students with physical disabilities who did not attend physical education classes in their schools. It should be noted that the physical education teachers may not be aware of all of the disabled students who do not attend physical education. The fact that administrators were given a priority list for having the teachers' questionnaire completed would also contribute to this difference. Administrators were instructed to choose, wherever it was possible, physical education teachers who had students with physical disabilities attending their classes. It must be noted that the 21.8% figure reflects that percentage of schools in which students with physical disabilities do not attend physical education classes; so it does not necessarily reflect the number of these students who are not participating in physical education. In fact, 21.8% may actually be a very conservative estimate of the disabled students who are not participating physical education classes.

In regard to participation in physical education curriculum, it was found that only 19.6% of teachers reported that students with physical disabilities attended regular physical education classes and participated in all the activities. This finding is significantly lower than the results of another Canadian study on integration which was conducted by the Ontario Ministry of Education. In the study conducted by Larter, S., Cheng, M., Chandorkar, B., and Willet, M. (1982) there is reported noticeably higher levels of participation by handicapped students in physical education. Teachers in this study reported that approximately 62% of disabled students participated fully in the regular physical education program. There are, however, a number of differences which do not allow results to be validly compared. The sample for their study was different in that it consisted both of physically handicapped and of health impaired students. Their study dealt but with one school board "which makes every effort to integrate physically handicapped children into local schools which can accomodate their needs" (Larter et al., 1982, p. 8). Throughout Canada, there may well be differences among participation levels depending on the policy of the school board and the resources available to the teacher for mainstreaming.

Mainstreaming In Specific Curriculum Activities

Certain physical activities may or may not lend themselves to successful participation by disabled students. The activity in which the participation of students with physical disabilities was most frequent was fitness. The majority of the teachers reported full participation or participation in a special active role. It is a common practice to have a fitness component as part of most physical education classes. The very nature of fitness activities allows for active participation of students with physical disabilities. There is a wide range of fitness activities which can be used to maintain and develop the functioning of various parts of the body. Since little interdependence of students is required in performing these activities it is possible for students with wide physical differences to participate in them. There is little need to adapt equipment in order to include a wide range of students in fitness activities. These factors make it easy for the instructor to include students with physical disabilities in that portion of a physical education class.

Of all culturally normative activities, aquatics and children's games stand out as activities allowing students with physical disabilities to participate fully. Two other activities (floor hockey and dance) were identified by over 30% of the teachers who offer them as activities that allow the full participation of disabled students. Each of these four culturally normative activities have different

characteristics which may allow for increased participation by students with mobility problems. Aquatics is ideal for a number of individuals with physical disabilities. The water actually assists in compensating for the person's disability by helping to hold him or her up. For example, a student who requires a walker for mobility on land may be able to move around quite freely in the water. Children's games are often less competitve, and participants normally perform entirely independently of one another. This can allow for easy adaptation to accomodate individuals with physical disabilities. Floor hockey has a goaltending component which requires the protection of only a small area. Students who may have mobility problems can participate readily as goaltenders. Students in wheelchairs, for example, do not require a great deal of movement to stop shots; and because the large surface area of the wheelchair is an advantage, they can be very effective as goalies. Dance is an activity which can be done individually or with a partner or group. In particular if it is done individually, it allows students with physical disabilities to participate.

Of the activities identified as culturally normative, both football and skating were found to have the lowest level of active participation by students with physical disabilities. In both of these activities, over 50% of the respondents indicated that students with physical disabilities either did not participate or participated only as observers. The nature of these activities is such that it

is not surprising they have the lowest level of participation. Football requires a lot of speed and mobility, factors which would prevent the majority of individuals with disabilities from being involved. Those sports which use grass playing fields pose a difficulty for students in wheelchairs. Nevertheless, participation in football should not be ruled out for all physically disabled students, since 17.0% of the teachers of these students identified football as allowing for full participation. Skating is an activity that requires a great deal of co-ordination of the legs. Since a number of students with physical disabilities have limited use of their legs, they would not be able to participate in traditional skating.

A number of activities were reported as providing students with physical disabilities with a special active role. Approximately half of the teachers identified fitness activities (51.7%) gymnastics (48.1%), and outdoor skills (48.1%) as providing this type of role. As previously mentioned, fitness activities can easily be adapted to include students with physical disabilities. The nature of certain gymnastic activities makes it possible for students with physical disabilities to participate without the use of their mobility aids. The use of mats in gymnastics for floor exercises can allow for certain students to move without the use of canes, crutches, wheelchairs, braces, or other mobility aids. Some other gymnastic activities require mainly upper body work, so students with lower body

impairment can participate in them. Kunc (1981) states "it is often interesting and enjoyable for the disabled student simply to experience what it feels like to swing on the bars". Outdoor education is made up of a number of activities which allow for participation of students with limited mobility. Activities which require very little mobility include shelter-building, fire-starting and cooking. Other activities such as skiing,canoeing, and kayaking have been demonstrated as being highly adaptable to many participants.

Activities which were identified as providing students with a special non-active role, were basketball (10.3%), volleyball (9.1%), football (8.5%), field events (8.4%), track events (7.7%) and floor hockey (7.6%). All of these activities have either a scoring and/or timing component to them. There may be some question as to the value of involvement in a non-active role. It must be remembered, however, that one of the assumed benefits of integration is the increased socialization of the disabled individual. Through the proper structuring of non-active roles, social interaction between students with physical disabilities and their able-bodied peers can be greatly promoted. In allowing the disabled student to be in charge of roles such as refereeing, scoring, timing, substitution, and coaching, a stimulus for social interaction is provided. Kunc (1981) notes that it is not always possible for students with disabilities to participate fully in all sports, but that

through related activities such as timekeeping and refereeing these students can obtain a great deal of enjoyment and social benefits.

In these same activities, a large number of students with physical disabilities were reported as participating as observers only, or as not participating at all. There is little doubt that it would be of more value for students to participate in a special, non-active role that may promote social interactions, than simply to watch the activity or not to participate at all.

It is interesting to note that some activities that were identified by a large percentage of teachers as facilitating participation were also identified by a substantial number of teachers as activities in which students were not participating. Of special note is aquatics of which almost 50% of the teachers indicated there was full participation by students with physical disabilities. In the same activity, 25% of the teachers indicated that there was no participation by disabled students. This difference could be explained by a number of possible factors, for example, transportation problems or lack of support staff. Further study is needed to examine these activities in more detail. Other activities in which this pattern of response was apparent were gymnastics, climbing activities and track and field events. It is unclear why such diverse responses should be reported for these activities. Track and field is one of the major activities in which athletes with physical

disabilities compete. Disabled students should participate in internationally recognized events for disabled athletes. For example wheelchair athletes should be provided the opportunity to participate in track and field events. They do not have to compete against their able-bodied peers but should be allowed the opportunity to train in them and to try to improve their own performance levels.

Four activities (bowling, handball, field hockey, and weight lifting) were infrequently offered in schools across the nation; but they were identified as activities that allowed for participation. Fifty percent or more of teachers whose schools offered these activities indicated that disabled students could participate fully in a special active role. In considering the individualistic nature of bowling and weightlifting, it is understandable how these activities would allow for students with disabilities to participate. It is interesting to note that handball and field hockey were indicated. The identification of these activities by some of the teachers may be due to the type of disabilities experienced by their students. Further research is needed to examine these four sports as potential activities that could be included in the physical education curriculum of a mainstreamed school. In all other activities which were offered infrequently in schools across Canada, the majority of students with physical disabilities either did not participate or participated as observers only.

A more extensive examination of specific activities needs to be undertaken. There is a need to look at specific mobility problems and determine how these can be matched to the present physical education curriculum. Perhaps students gain from participating in a non-active role, but there is a need to examine the percentage of time that they are not active. If the percentage of time that they spend in observing activities is high, there may be a need for an individualized instructional program.

The nature of physical activities should be examined when students with physical disabilities are mainstreamed. If appropriate activities are not used in the mainstreamed class, the curriculum itself becomes a barrier. When one is choosing activities for a mainstreamed class, it is important to take into consideration the type and degree of disability of the student. As a result of the variability in the kinds of and the severity of disabilities, an activity which may allow participation by one disabled person does not necessarily allow participation by another disabled person.

Resources Available for Mainstreaming in Physical Education

Resources can play an important part in the success of mainstreaming. These resources include both support personnel and curriculum materials. In this study it was found that the majority of teachers had no support personnel available to them in their physical education classes.

Previous studies have noted the perceived need by teachers for having support personnel in mainstreamed classes. Firth and Edwards (1981) found that the disproportional amount of time required by students with physical disabilities was a major concern of regular classroom teachers. Larter et al. (1982) found that one of the frequent suggestions by teachers to improve integration was the provision of assistants. The use of support personnel could greatly help regular physical education teachers by freeing them from one to one instructional time which is required by some special students.

The availability of consultants in physical education who could be of help to teachers with mainstreamed students was also investigated. The majority of teachers indicated that either there were no consultants available or they were not aware of any. The lack of consultants or lack of awareness of there being potential help can act as a barrier to integration of the disabled in physical education classes. Both Watkinson et al. (1985) Later et al. (1982) identify the need for specialized help as being important if the benefits of mainstreaming are to be maximized. The findings of this study indicate that, for a large number of schools, a specialized physical education consultant is not available. They indicate that a number of teachers are not sure whether there are any specialized human resources available to them. The provision of specialized consultants by school boards may help to increase the level of

participation of students with disabilities in physical education classes.

It was found that the majority of the teachers had no program materials available which could assist them in providing a program for students with physical disabilities. Moreover, a significant number of teachers were unaware of any program materials which could assist them in mainstreaming in physical education. Firth and Edwards (1981) found that a major concern of teachers who had previous experience with physically disabled students was the lack of materials which could assist them. The lack of curriculum materials, or the lack of awareness of their potential contribution can act as a barrier to mainstreaming in physical education.

Only a small minority (4.2%) of administrators reported receiving funds for the inservice training of teachers. This appears to be a small percentage considering that numerous researchers have identified inservice training as being essential for successful mainstreaming (Drummer & Windham, 1982, Gear & Gable, 1979, and Powers, 1983). There have been a number of major changes in adapted physical education over the past five years; yet it was found that only a small minority of teachers who were teaching physical education to students with physical disabilities reported having participated in adapted physical education workshops. This clearly indicates there may be a need for more inservice opportunities. In order to provide these opportunities,

sufficient funding must be available. It is clear from this study that funds for inservice training either are lacking or the funds are not being channelled into this area.

Chapter VI

Conclusions and Recommendations

Summary

This study was concerned with investigating the mainstreaming of students with physical disabilities into regular school physical education programs. In order to investigate mainstreaming, two major areas were identified as necessary for this study. These were: (a)information on the frequency and degree of participation of physically disabled students in regular elementary and secondary physical education programs and (b)information on barriers that exist in elementary and secondary schools that may affect the mainstreaming of students with physical disabilities into physical activity programs. A total of 556 schools were sampled from across Canada. From this sample 1,134 administrators and 1,107 teachers provided information on the areas under investigation. The data were analyzed by using frequencies, breakdown and cross tabulations program from the SPSSx suite of programs. Appropriate statistics were computed as needed. These statistics included frequencies and chi square.

The findings of this study indicate that mainstreaming is indeed taking place in a large number of schools across Canada. Approximately one third of administrators (34.7%) said they had students with physical disabilities attending their school. Moreover, almost half of the teachers (47.5%)

indicated that they had taught physical education to students with physical disablities at some time in their teaching career.

It was found that in a number of cases (10.3%), the mainstreamed students were reported as attending special physical education classes for disabled students only. Furthermore, 21.8% of administrators indicated that students with physical disabilities who attended their school took academic classes or other activities instead of physical education. It is clear that a number of disabled students who are mainstreamed are not being integrated into physical education classes. In fact, a significant number are not receiving any physical education at all.

The degree of participation by mainstreamed students who regularly attend physical education classes was found to vary depending upon the specific activity. Only 19.6% of the teachers indicated that students with physical disabilities participated in regular physical education classes and did all activities. The majority of disabled students (67.0%) who attended physical education classes participated in only some of the activities. Although students may attend physical education classes, it does not necessarily mean that they are actively participating. Actually 8.6% of the physical education teachers indicated that they had disabled students attending their classes but not participating in them.

A number of barriers which may prevent students with physical disabilities from being mainstreamed to the maximum extent were identified. These include environmental, attitudinal, educational, and resource barriers. Only 17.9% of the administrators felt that their school had no indoor barriers, and only 32.8% of the administrators felt that there were no outdoor barriers to playgrounds or other outdoor facilities. In the majority of schools, there are a number of indoor and outdoor conditions that may act as barriers to mainstreaming.

Often barriers to mainstreaming are thought of as being just physical in nature, because these barriers in particular have been under scrutiny over the last decade. This study indicates that there are indeed physical barriers, but it also points to other barriers that may have an equal or even greater effect on the success of mainstreaming. Clearly one of these barriers could be attitudes. The majority of teachers (72.7%) were very positive toward the general concept of mainstreaming. However, this level of optimism did not carry over to physical education since nearly half ot the physical educators felt that disabled students would benefit more from placement in special physical education classes. A large number of teachers were uneasy about dealing with special medical concerns, felt that the safety of the disabled students was at risk, and that they required too much of the teacher's time and attention in regular physical

education classes. It should be acknowledged that the attitudes of these teachers may be justified in some cases; at the same time, it must be remembered that attitudes may be secondary barriers. Such barriers, when recognized, can be lessened through proper education, planning, and program implementation.

It is also noted that differences in attitudes on some issues may be the result of lack of the teachers' exposure to students with physical disabilities. Shotel, Iano and McGettigan (1972) indicate that through controlled exposure in practicum courses, prospective teachers' attitudes have been changed more positively toward mainstreaming.

It is clear that a simplistic view of the relationship between attitudes and mainstreaming is not tenable. Although most teachers were positive toward the general concepts of mainstreaming, a number of attitudinal barriers may exist in certain specific areas, such as medical concerns, safety, and the disproportional amount of the physical educator's time required by students with physical disabilities.

The majority of teachers were very positive toward the general concept of mainstreaming. In fact 72.7% felt that physically disabled students would benefit as much or more from placement in regular schools. However this optimism was not as positive towards physical education, because nearly half (45.7%) of the physical educators felt that disabled students would benefit more from placement in special physical education classes. A large number of teachers

(67.5%) felt that it was difficult to choose activities for a mainstreamed class. Over half of them (52.8%) were uneasy about dealing with special medical concerns. Over one third of them (37.0%) felt that students with physical disabilities require too much of their time and attention in a regular physical education class. It is clear that although teachers are in favor of the general concept of mainstreaming, they do have some major concerns regarding the integration of disabled students in physical education.

Barriers are also indicated in terms of lack of professional preparation. This lack is noted at both the preservice and inservice levels. Although most teachers were supportive of the concept of mainstreaming, the majority of teachers (59.9%) felt inadequately prepared to teach disabled students in physical education. In examining the preservice training of the teachers, it was found that a significant number of teachers (19.2%) had not taken any formal physical education courses in University. This may make it difficult for them to teach a regular physical education class, let alone a mainstreamed class. In relationship to inservice training, only a small proportion (10.6%) of the teachers had participated in any workshops or seminars in adapted physical education within the past 5 years. Considering the limited professional preparation related to mainstreaming, it is not surprising that the majority of teachers are hesitant to instruct students with physical disabilities in a physical education setting.

Lack of support resources may also act as barriers to mainstreaming. The majority of teachers who had disabled students either did not have any program materials available to them, or they did not know of any to which they could have access. Besides, most teachers either did not have any consultants available, or they did not know of any that were acessible who could assist them with mainstreaming disabled students. Without proper support resources, mainstreaming can be extremely difficult for teachers who have had no training or no experience in instructing students with physical disabilities.

The very nature of certain activities may also cause these activities to be a barrier. It is also noted that due to the variability in mobility problems of the disabled individuals, an activity which acts as a barrier for one disabled individual does not necessarily mean that it is a barrier for another disabled individual.

Conclusions

From the findings of this study, the following descriptive statements can be put forward concerning the nature and extent of mainstreaming students with physical disabilities into regular physical education programs in Canada.

7. Mainstreaming students with physical disabilities is widespread in schools across Canada.
8. A significant number of students who are being

mainstreamed in schools are not being integrated in physical education.

9. A number of schools have environmental barriers to mainstreaming. These may be indoor or outdoor barriers or a combination of both.
10. A majority of physical education teachers feel inadequately prepared to teach students with physical disabilities.
11. Most teachers lack training specific to dealing with disabled students in physical education.
12. Although teachers attitudes are very positive toward mainstreaming in general, this optimism does not seem to persist in the field of physical education.
13. There is a lack of support resources available to many teachers who mainstream students.
14. The nature of some specific physical education activities may act as a barrier to the participation of students with physical disabilities.

Recommendations

Implications From the Study

The findings from this study have a number of implications for mainstreaming in physical education. These include:

1. A minority of teachers have formal education in dealing with physically disabled students in physical education.

There is a need for university programs to provide courses for their students which deal with teaching physically disabled children in physical education in mainstreamed programs.

2. A minority of teachers have taken workshops or seminars in adapted physical education within the past 5 years. There is a need to provide inservice training for those teachers who are already in the system and who are teaching students with physical disabilities in their classes.
3. The majority of teachers who teach physically disabled students in regular schools either do not have, or are not aware of, any available program materials which can assist them in the physical education setting. There is a need for a coordinating body such as C.A.H.P.E.R. to gather, develop and disseminate materials about mainstreaming in physical education to teachers who have physically disabled students in their classroom.
4. The majority of teachers who instruct physically disabled children in regular schools either do not have, or are unaware of, any consultants who could assist them in providing a physical education program for disabled students. There is a need to have available resource people who have specialized training in adapted physical education; they are able to provide assistance to physical education teachers who have mainstreamed students. In addition there is a need to make sure

teachers are aware of these resource personnel.

5. A number of schools have indoor and/or outdoor barriers to mainstreaming. It is recommended that an assessment of schools be conducted prior to mainstreaming taking place in them, and that if any barriers are present, appropriate action be taken to remove these barriers.

Changes to the Study

A number of recommendations can be made for changes to the study.

1. In the administrators' questionnaire, the last question was worded as follows: How would you describe your attitude regarding the placement of physically disabled students in the school system? Four choices were given. A significant number of administrators, however, did not feel that this range of choices was complete. In fact, a number of administrators wrote comments indicating that they favor integration providing they have proper support in terms of funds, personnel, and materials. If this question were to be used in another survey, it should include the above category and also include another category which allows space in which administrators may write statements which do not fit the choices given.
2. In the teachers' questionnaire, the question concerning the the level of participation of mainstreamed students solicited valuable

information. However, there may be some confusion as to what constitutes a special non-active role and a special active role. If this question were to be used again, it would be useful to use specific examples of these roles to clarify their meaning.

3. This study did not determine when schools were built. It would be useful to include a question regarding the age of the school in order to determine if the construction plans for new schools have taken into account the needs of disabled students. If schools are still being constructed with indoor and outdoor barriers, then information regarding these barriers needs to be distributed to provincial education departments that are responsible for the construction of schools.
4. The sample for this study was chosen on the basis of a minimum cell size combined with an equal percentage sample from the other provinces. This resulted in noticeably large samples in Quebec and Ontario. In future studies the sample size from these provinces should be reduced.

For Further Study

A number of recommendations for further study are made based upon the results obtained in the present study.

1. This study did not investigate the need for and the background of support personnel. Other studies

should examine the training of support personnel and determine if there is a need for upgrading their skills in order to help them in assisting teachers in mainstreaming.

2. Other studies should be carried out which more closely examine specific teacher needs in the area of program materials.
3. This study generally examined how the nature of specific physical activities affects the level of participation by mainstreamed students. Other studies should be undertaken which investigate in more detail how different physical activities and different kinds of disabilities affect the level of participation.
4. This study briefly examined attitudes of teachers. Other studies should examine in more depth how their attitudes can affect the level of participation by mainstreamed students.
5. Teachers reported that students with physical disabilities use a wide range of mobility aids. Future studies should examine more specifically how different mobility aids relate to the level of the students' participation in specific physical activities.

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Appendix A

Administrators Cover Letter

and

Questionaire

THE CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION
L'ASSOCIATION CANADIENNE POUR LA SANTÉ, L'ÉDUCATION PHYSIQUE ET LA RÉCRÉATION

Dear Administrator:

Approximately a decade ago a major commitment was made within the field of education to bring disabled and handicapped students into the mainstream of education wherever possible. In the years since this commitment was made there has been virtually no attempt to evaluate the progress of the mainstreaming movement in physical education. The Adapted Programs Committee of the Canadian Association for Health, Physical Education and Recreation (C.A.H.P.E.R.) has been commissioned by Fitness and Amateur Sport to conduct a nation-wide survey to investigate the integration process and its ramifications.

Your school is one of a small number of schools chosen randomly from across Canada. In these schools administrators and teachers are being asked to share information and opinions on the integration of physically disabled students in physical education. In order that the results will truly represent the thinking of the principals and teachers in your province, it is important that each questionnaire be completed and returned. The teacher's questionnaire should be filled out by one teacher in your school in the following preference:

1. Any teacher who instructs physical education to a class which contains both physically disabled and non-disabled students.
2. A physical education teacher.
3. A classroom teacher who teaches physical education.
4. Any teacher who instructs physical education to only physically disabled students.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so we may check your school off the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire.

Thank you for your assistance.

Sincerely,

Jane Watkinson

E.J. Watkinson, Ph.D.
Project Coordinator

JW/sl
Enclosure

333 RUE RIVER ROAD, OTTAWA (VANIER), ONTARIO K1L 8H9
TELEPHONE (613) 746-0060 (260 or/ou 261) or/ou 746-5909

A NATIONWIDE SURVEY OF ADMINISTRATORS AND TEACHERS REGARDING THE INTEGRATION OF PHYSICALLY DISABLED STUDENTS INTO REGULAR SCHOOL PHYSICAL EDUCATION PROGRAMS.

ADMINISTRATOR'S QUESTIONNAIRE

A Study Sponsored Jointly

by

The Canadian Association For Health, Physical Education and Recreation

and

Fitness and Amateur Sport

C.A.H.P.E.R. Adapted Programs Committee
Department of Physical Education and Sport Studies
University of Alberta
Edmonton, Alberta
T6G 2H9

ADMINISTRATOR'S QUESTIONNAIRE

This questionnaire is to be filled out by an individual in an administrative position in the school (principal or vice principal).

DEFINITIONS

Physically Disabled

For the purposes of this study the term physically disabled refers to any persons who have permanent or long term impairment of mobility. They may or may not require the use of some type of special equipment for mobility such as cane(s), crutch(es), walker, manual wheelchair or electric wheelchair. This may include individuals with cerebral palsy, muscular dystrophy, spina bifida, amputation, spinal cord injury or other conditions. In this study the term physically disabled does not include individuals recovering from temporary medical conditions (e.g. fractures) or individuals with hearing impairment, visual impairment, mental handicaps or physical disabilities that do not impede mobility.

Regular School

For the purpose of this study the term regular school refers to both academic and vocational schools.

QUESTIONS

1. Which statement best describes your school? (Circle the number of your answer)

    1. IS A REGULAR SCHOOL WITH NO PHYSICALLY DISABLED STUDENTS
    2. IS A REGULAR SCHOOL WITH PHYSICALLY DISABLED STUDENTS ATTENDING REGULAR CLASSES
    3. IS A REGULAR SCHOOL WITH A SPECIAL CLASS FOR PHYSICALLY DISABLED STUDENTS
    4. IS A SPECIAL SCHOOL FOR PHYSICALLY DISABLED STUDENTS
    5. OTHER (Specify) _____

2. Please list the grades offered in your school.

    _____

3. What is the total number of students enrolled in your school? (Circle the number of your answer)

    1. 1-199
    2. 200-399
    3. 400-599
    4. 600-999
    5. 1,000-1,499
    6. OVER 1,500

4. Your school is located in a population center of (Circle the number of your answer):

   1. 1-999
   2. 1,000-9,999
   3. 10,000-99,999
   4. 100,000-499,999
   5. OVER 500,000

5. What are the architectural conditions in your school that may act as barriers for the physically disabled? (Circle all appropriate numbers)

   1. STAIRS BUT NO RAMP TO ENTER THE SCHOOL.
   2. MULTI-STORIED SCHOOL WITH NO ELEVATOR.
   3. NO WHEELCHAIR ACCESS TO WASHROOM CUBICLES.
   4. STAIRS BUT NO RAMPS TO ENTER THE GYMNASIUM.
   5. NO WHEELCHAIR ACCESS TO LOCKER ROOMS OR SHOWER.
   6. OTHER (Specify) _____
   7. NONE

6. What are the architectural conditions that may act as barriers to outdoor activity for the physically disabled? (Circle all appropriate numbers)

   1. STEPS OR CURBS TO PLAY AREAS.
   2. SOFT SURFACES FOR ACCESS TO PLAY AREAS.
   3. NO HARD OPEN SURFACES FOR PLAY.
   4. OTHER (Specify) _____
   5. NONE

7. Do you have any physically disabled students (that is any who have impairment of mobility) in your school? (Circle YES if you have one or more).

   1. YES → CONTINUE TO QUESTION #8
   2. NO → GO TO QUESTION #13

8. What is the total number of physically disabled students in your school?

   _____

9. These physically disabled students attend: (Circle all appropriate numbers)

   1. REGULAR PHYSICAL EDUCATION CLASSES
   2. SPECIAL PHYSICAL EDUCATION CLASSES FOR DISABLED STUDENTS OFFERED IN THIS SCHOOL
   3. SPECIAL PHYSICAL EDUCATION CLASSES FOR DISABLED STUDENTS OFFERED IN ANOTHER SCHOOL OR AGENCY
   4. ACADEMIC CLASSES IN LIEU OF PHYSICAL EDUCATION CLASSES
   5. OTHER ACTIVITIES INSTEAD OF PHYSICAL EDUCATION CLASSES (Specify)

      _____

10. For what purposes have you received special funds relating to physically disabled students in your school? (Circle all appropriate numbers)

1. FUNDS FOR MODIFYING FACILITIES FOR THE PHYSICALLY DISABLED
2. FUNDS FOR PURCHASING SPECIAL EQUIPMENT FOR PHYSICAL EDUCATION CLASSES FOR THE PHYSICALLY DISABLED
3. FUNDS FOR EMPLOYING SUPPORT PERSONNEL FOR THE PHYSICALLY DISABLED
4. FUNDS FOR PROVIDING IN-SERVICE TRAINING FOR TEACHERS OF THE PHYSICALLY DISABLED
5. OTHER...(Specify)_____
6. NO FUNDS RECEIVED

11. How would you describe the attitudes of the majority of parents of non-disabled students? (Circle the number of your answer)

1. FAVOUR INTEGRATION OF PHYSICALLY DISABLED STUDENTS
2. FAVOUR SPECIAL SEGREGATED CLASSES FOR PHYSICALLY DISABLED STUDENTS
3. FAVOUR SPECIAL SEGREGATED SCHOOLS FOR PHYSICALLY DISABLED STUDENTS
4. DON'T KNOW

12. How would you describe the attitudes of the majority of parents of physically disabled students? (Circle the number of your answer)

1. FAVOUR INTEGRATION IN PHYSICAL EDUCATION
2. FAVOUR SPECIAL SEGREGATED CLASSES IN PHYSICAL EDUCATION
3. FAVOUR EXEMPTION OF DISABLED STUDENTS FROM PHYSICAL EDUCATION
4. DON'T KNOW

13. How would you describe your attitude regarding placement of physically disabled students in the school system? (Circle the number of your answer)

1. FAVOUR COMPLETE INTEGRATION OF PHYSICALLY DISABLED STUDENTS
2. FAVOUR SPECIAL CLASS FOR PHYSICALLY DISABLED STUDENTS IN THE REGULAR SCHOOL.
3. FAVOUR SPECIAL SCHOOLS FOR PHYSICALLY DISABLED STUDENTS
4. DON'T KNOW

THANK YOU FOR YOUR TIME AND COOPERATION IN PARTICIPATING IN THIS SURVEY.

Return this questionnaire along with the teacher's completed questionnaire to:

C.A.H.P.E.R. Adapted Programs Committee
ATTENTION: J. WATKINSON
Department of Physical Education and Sport Studies
University of Alberta
Edmonton, Alberta
T6G 2H9

Appendix B

Teachers Cover Letter

and

Questionnaire

cahper acsepr

THE CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION
L'ASSOCIATION CANADIENNE POUR LA SANTÉ, L'ÉDUCATION PHYSIQUE ET LA RÉCRÉATION

Dear Teacher:

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Thank you for your assistance.

Sincerely,

Jane Watkinson

E.J. Watkinson, Ph.D.
Project Coordinator
Department of Physical Education
& Sport Studies
University of Alberta
Edmonton, Alberta
T6G 2H9

JW/sl
Enclosure

A NATIONWIDE SURVEY OF ADMINISTRATORS AND TEACHERS REGARDING THE INTEGRATION OF PHYSICALLY DISABLED STUDENTS INTO REGULAR SCHOOL PHYSICAL EDUCATION PROGRAMS.

TEACHER'S QUESTIONNAIRE

A Study Sponsored Jointly

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The Canadian Association For Health, Physical Education and Recreation

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C.A.H.P.E.R. Adapted Programs Committee
Department of Physical Education and Sport Studies
University of Alberta
Edmonton, Alberta
T6G 2H9

TEACHERS' QUESTIONNAIRE

DEFINITIONS

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Regular School

For the purpose of this study the term regular school refers to both academic and vocational schools.

QUESTIONS

1. Have you ever taught physical education to physically disabled students? (Circle the number of your answer)

   1. YES
   2. NO

2. To what extent do you feel prepared to teach physical education to physically disabled students? (Circle the number of your answer)

   1. WELL PREPARED
   2. MODERATELY PREPARED
   3. INADEQUATELY PREPARED
   4. DON'T KNOW

3. Have you taken a university course which dealt with disabled individuals? (Circle the number of your answer)

   1. YES
   2. NO

   If YES, was this course in physical education? (Circle the number of your answer)

   1. YES
   2. NO

4. Have you participated in any workshops or seminars in adapted physical education within the past 5 years? (Circle the number of your answer)

   1. YES (Specify type of workshop)_____
   2. NO

5. What percentage of your instructional time is spent in teaching physical education classes? (Circle the number of your answer)

   1. 20% OR LESS
   2. 21% TO 40%
   3. 41% TO 60%
   4. 61% TO 80%
   5. 81% TO 100%

6. Please assess each of the following statements and indicate by circling one of the numbers whether you: 1-strongly agree, 2-agree, 3-disagree, or 4-strongly disagree. Answer this question regardless of whether or not you have physically disabled students in your classes. (Circle the number of your answer)

	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
a) A physically disabled student should be required to take physical education.	1	2	3	4
b) In comparison to non-disabled students physically disabled children do not like physical education.	1	2	3	4
c) The physical fitness of the physically disabled student can be improved.	1	2	3	4
d) The safety of a physically disabled student is at risk in a physical education class.	1	2	3	4
e) It is difficult to assess the skills and abilities of a physically disabled student.	1	2	3	4
f) Physically disabled students would benefit more from attending academic classes than they would from attending physical education classes.	1	2	3	4
g) The safety of the non-disabled student is at risk if the physically disabled student participates in regular physical education classes.	1	2	3	4
h) Physically disabled students would benefit more from placement in special schools for disabled students only.	1	2	3	4
i) It is difficult for non-disabled students to benefit maximally when a physically disabled student is part of a physical education class.	1	2	3	4
j) It is difficult to choose activities that benefit both the physically disabled and non-disabled students in a physical education class.	1	2	3	4
k) I feel uneasy about dealing with special medical problems that may arise when a physically disabled student is participating.	1	2	3	4
l) I feel that disabled students need skill and fitness upgrading before they enter integrated physical education classes.	1	2	3	4
m) Physically disabled students need too much time and attention in a regular physical education class.	1	2	3	4
n) It is not the job of a regular physical education teacher to instruct physically disabled students.	1	2	3	4
o) Physically disabled students would benefit more from placement in special physical education classes for disabled students only rather than placement in regular physical education classes.	1	2	3	4

7. Do you currently have any physically disabled students (that is, any who have impairment of mobility) in your physical education class? (Circle YES if you have one or more).

CONTINUE TO QUESTION 8 ← 1. YES
2. NO → GO TO QUESTION 18

8. What kind of special equipment is used by your physically disabled student(s) for mobility in physical education? (Circle all appropriate numbers)

1. BRACE(S)
2. CANE OR CRUTCHES
3. WALKER
4. ARTIFICIAL LIMB
5. ELECTRIC WHEELCHAIR
6. MANUAL WHEELCHAIR
7. OTHER (Specify)_____
8. NONE USED

If a manual wheelchair is used is it specially designed for physical activity (e.g. light weight, low back, small wheels for younger children)? (Circle number of your answer)

1. YES
2. NO
3. DON'T KNOW

9. Which statements best describe the participation of physically disabled students in physical education in your class. (Circle all appropriate numbers)

1. PARTICIPATES IN REGULAR PHYSICAL EDUCATION CLASS AND DOES ALL OF THE SAME ACTIVITIES AS THE OTHER STUDENTS.
2. PARTICIPATES IN REGULAR PHYSICAL EDUCATION CLASS AND DOES SOME OF THE SAME ACTIVITIES AS THE OTHER STUDENTS.
3. PARTICIPATES IN A SPECIAL PHYSICAL EDUCATION CLASS FOR DISABLED STUDENTS.
4. ATTENDS REGULAR PHYSICAL EDUCATION CLASS BUT DOES NOT PARTICIPATE
5. DOES NOT PARTICIPATE IN PHYSICAL EDUCATION.

10. What type of support personnel is available to help you in the physical education class? (Circle the number of your answer)

1. PAID
2. VOLUNTEER
3. BOTH
4. NONE

11. Are there program materials conveniently available which can assist you in providing a physical education program for the physically disabled? (Circle the number of your answer)

1. YES
2. NO
3. DON'T KNOW

12. Are there any consultants available who can assist you in providing a physical education program for disabled students? (Circle the number of your answer)

    1. YES
    2. NO
    3. DON'T KNOW

13. Which category or categories describe(s) the participation of the physically disabled student(s) in extracurricular programs? (Circle all appropriate numbers)

    1. PARTICIPATES IN REGULAR RECREATIONAL PROGRAMS (PHYSICAL ACTIVITY CLUBS)
    2. PARTICIPATES IN REGULAR INTRAMURAL PROGRAMS
    3. PARTICIPATES IN REGULAR INTERSCHOOL PROGRAMS
    4. PARTICIPATES IN SPECIAL EXTRACURRICULAR PROGRAMS FOR THE PHYSICALLY DISABLED
    5. DOES NOT PARTICIPATE

14. Which statements best describe the involvement of the parents of disabled students? (Circle all appropriate numbers)

    1. SEEK INFORMATION ON STUDENT'S PROGRESS IN PHYSICAL EDUCATION
    2. REQUESTED EXEMPTION FOR THE DISABLED STUDENT FROM PHYSICAL EDUCATION.
    3. REQUESTED THAT THE PHYSICALLY DISABLED STUDENT PARTICIPATE IN PHYSICAL EDUCATION.
    4. PROVIDED INFORMATION ON PAST ACTIVITIES.
    5. PROVIDED INFORMATION ON RESOURCES.
    6. PROVIDED INFORMATION ON THE STUDENT'S DISABILITY.
    7. OTHER...(Specify)_____
    8. THERE HAS BEEN NO PARENTAL INVOLVEMENT.

15. Are your physically disabled students assessed before entering the physical education program? (Circle the number of your answer)

    1. YES
    2. NO
    3. DON'T KNOW

    If YES, specify the kind of assessment: (Circle all appropriate numbers)

    1. MEDICAL
    2. FITNESS
    3. SKILL
    4. OTHER...(Specify)_____

16. How would you describe the behavior of the majority of non-disabled students towards the physically disabled student(s) in your school? (Circle the number of your answer)

    1. SEEKS POSITIVE INTERACTIONS
    2. PROMOTES NEGATIVE INTERACTIONS
    3. TOLERATES BUT DOES NOT INITIATE INTERACTIONS
    4. AVOIDS INTERACTIONS
    5. THERE IS NO INTERACTION

17. Please circle the number of the category that best reflects the participation of your physically disabled student(s) in the following activities in physical education classes. Omit any activities that are not offered in your regular physical education program.

	DOES NOT PARTICIPATE	PARTICIPATES AS OBSERVER	PARTICIPATES IN SPECIAL NON-ACTIVE ROLE	PARTICIPATES IN SPECIAL ACTIVE ROLE	PARTICIPATES FULLY
Aquatics	1	2	3	4	5
Archery	1	2	3	4	5
Basketball	1	2	3	4	5
Badminton	1	2	3	4	5
Bowling	1	2	3	4	5
Childrens Games	1	2	3	4	5
Climbing Activities	1	2	3	4	5
Curling	1	2	3	4	5
Dance	1	2	3	4	5
Field Hockey	1	2	3	4	5
Fitness Activities	1	2	3	4	5
Floor Hockey	1	2	3	4	5
Football	1	2	3	4	5
Golf	1	2	3	4	5
Gymnastics	1	2	3	4	5
Handball	1	2	3	4	5
Ice Hockey	1	2	3	4	5
Outdoor Skills	1	2	3	4	5
Skating	1	2	3	4	5
Skiing	1	2	3	4	5
Soccer	1	2	3	4	5
Softball/Baseball	1	2	3	4	5
Tennis	1	2	3	4	5
Track Events	1	2	3	4	5
Field Events	1	2	3	4	5
Volleyball	1	2	3	4	5
Weight Lifting	1	2	3	4	5
Wrestling	1	2	3	4	5
Other (specify)	1	2	3	4	5
Other (specify)	1	2	3	4	5

18. What is your gender? (Circle the number of your answer)

1. MALE
2. FEMALE

19. Do you have a physical education or equivalent degree (example: Kinesiology)? (Circle the number of your answer)

1. YES
2. NO

20. During your university education how many physical education courses did you take? (Circle the number of your answer)

1. NONE
2. 1 TO 8
3. 9 TO 18
4. 19 OR MORE
5. DON"T KNOW

21. How many years of teaching experience do you have? (Circle the number of your answer)

1. LESS THAN 1
2. 1 TO 4
3. 5 TO 9
4. 10 OR MORE

THANK YOU FOR YOUR TIME AND COOPERATION.

Return Questionnaire to your Principal to send to:

C.A.H.P.E.R. Adapted Programs Committee
ATTENTION: J. WATKINSON
Department of Physical Education and Sport Studies
University of Alberta
Edmonton, Alberta
T6G 2H9

Appendix C

Ministers Letters

Saskatchewan

Minister
of Education

Legislative Building
Regina, Canada
S4S 0B3

(306) 565-7360

TO PRINCIPALS OF SASKATCHEWAN SCHOOLS

Dear Principal:

Approximately ten years ago major commitments were made within Education to bring disabled and handicapped youngsters into the mainstream of Education wherever possible. Among those who made this commitment was the Canadian Association for Health, Physical Education and Recreation (C.A.H.P.E.R.), whose concern was directed toward the integration of these individuals into physical activity programs. In the intervening years there has been virtually no attempt to evaluate the progress of this mainstreaming movement in the area of physical education.

The Adapted Programs Committee of C.A.H.P.E.R. has been commissioned to conduct a nationwide survey to investigate the integration process and its ramifications. The plans are to sample approximately 3,000 schools across Canada in an attempt to identify the factors which facilitate the integration process, as well as barriers that prevent successful integration of physically disabled children and youth into physical education programs.

Saskatchewan is pleased to cooperate in this study and your school has been selected as one of the schools to be surveyed.

Your cooperation in ensuring the completion of the attached questionnaire will certainly be appreciated. Thank you for your cooperation.

Sincerely,

Duane Wiseman
Legislative Secretary to
the Minister of Education

Patricia A. Smith

c.c. Directors of Education

Attach.

MANITOBA

MINISTER OF EDUCATION

WINNIPEG
R3C 0V8

February 10, 1984

E.J. Watkinson, Ph.D.
Project Coordinator
Associate Professor
Department of Physical Education
and Sport Studies
4th Floor Pavilion
The University of Alberta
Edmonton, Alberta
T6G 2H9

Mr. Michael Mahon
Provincial Coordinator
Manitoba Special Olympics
B1-171 Donald Street
Winnipeg, Manitoba
R3C 1M4

Dear Dr. Watkinson and Mr. Mahon:

Further to your joint letter requesting endorsation for a nation-wide survey on integrating handicapped students into existing physical activity programs, please be advised that I am prepared to endorse the project and would ask schools selected for the project to cooperate by completing and returning the questionnaire sent to them by the Adapted Programs Committee of the Canadian Association for Health, Physical Education and Recreation.

The rationale outlined for conducting the study and the commitment made by C.A.H.P.E.R. indicates a sincere concern for the physically and mentally disadvantaged.

Hopefully, the study will assist all schools and communities in dealing more effectively with handicapped children, a direction we in Manitoba have been pursuing for some time.

Best wishes and success with your project.

Yours sincerely,

Maureen Hemphill

Maureen Hemphill

Office of the Minister

Ministry of Education
Ministry of Colleges and Universities

Mowat Block
Queen's Park
Toronto, Ontario
M7A 1L2
416/965-5277

February 15, 1984

MEMORANDUM TO: Ontario principals and teachers selected for the CAHPER Adapted Programs Committee's research survey

FROM: Hon. Bette Stephenson, M.D.
Minister

SUBJECT: Survey re integration of physically disabled children and youth into physical education programs

---

The Adapted Programs Committee of the Canadian Association for Health, Physical Education and Recreation has been commissioned by the Minister of State, Fitness and Amateur Sport to conduct a nation-wide survey into the factors which facilitate, as well as those which prevent, the integration of physically disabled children and youth into physical education programs.

I am pleased to support this research which will not only clarify the current situation, but which will also provide an informational basis for designing future programs and materials to assist, where appropriate, placements for physically disabled children and youth in physical education classes.

Your co-operation and participation in this survey will be appreciated.

Bette Stephenson, M.D.

DEPARTMENT OF EDUCATION
P.O. BOX 6000, FREDERICTON, N.B.
E3B 5H1

OFFICE OF THE MINISTER

NEW BRUNSWICK
NOUVEAU BRUNSWICK
CANADA

MINISTERE DE L'EDUCATION
C.P. 6000, FREDERICTON, N.B.
E3B 5H1

CABINET DU MINISTRE

C O M M U N I Q U E

FROM: Clarence Cormier

TO: Selected School Principals

SUBJECT: The Integration of Disabled and Handicapped Children in Physical Activity Programs

DATE: 1984 03 20

The Adapted Programs Committee of the Canadian Association for Health, Physical Education and Recreation has been commissioned by Fitness and Amateur Sport Canada to conduct a nation wide investigation of the integration process. The investigation will identify factors that facilitate the integration process as well as barriers that prevent the successful integration of physically disabled children into physical education programs. The Department of Education is very interested in the identification of these factors and looks forward to the completion of the study.

Your school is one of approximately 3000 schools across Canada that have been randomly selected for the study. I ask for your support and the support of your school staff in making information available to the research team.

Thank you for your cooperation.

Clarence Cormier
CLARENCE CORMIER
Minister of Education

Ministre

Ministère de l'Éducation
Ministère des Collèges et Universités

Édifice Mowat
Queen's Park
Toronto, Ontario
M7A 1L2
(416) 965-5277

Le 15 février 1984

NOTE À L'INTENTION DES : Directeurs d'école et enseignants de l'Ontario choisis pour participer à l'étude menée par le Comité des programmes adaptés de l'ACSEPR

DE LA PART DE : Bette Stephenson, ministre

OBJET : Étude relative à l'intégration des enfants et des jeunes handicapés physiques aux programmes d'éducation physique

---

Le ministre d'État de la Condition physique et du Sport amateur a chargé le Comité des programmes adaptés de l'Association canadienne pour la santé, l'éducation physique et la récréation d'entreprendre une étude à l'échelle nationale sur les facteurs qui facilitent et ceux qui empêchent l'intégration des enfants et des jeunes handicapés physiques aux programmes d'éducation physique.

Je suis heureuse d'appuyer cette initiative qui permettra non seulement de faire le point sur la situation actuelle mais également de recueillir les renseignements nécessaires à la conception de programmes et de matériel qui aideront, si besoin est, au placement des enfants et des jeunes handicapés physiques dans des classes d'éducation physique.

Nous apprécierons votre collaboration et votre participation à cette étude.

Le ministre,

Bette Stephenson

DEPARTMENT OF EDUCATION
P.O. BOX 6000, FREDERICTON, N.B.
E3B 5H1

OFFICE OF THE MINISTER

NEW BRUNSWICK
NOUVEAU-BRUNSWICK
CANADA

MINISTÈRE DE L'EDUCATION
C.P. 6000, FREDERICTON, N.-B.
E3B 5H1

CABINET DU MINISTRE

COMMUNIQUE

DE: Clarence Cormier

A: Directeurs d'écoles sélectionnées

OBJET: Etudes sur l'intégration des handicapés physiques dans le programme d'éducation physique

DATE: le 20 mars 1984

La division de Condition Physique et Sport Amateur du Canada a mandaté le Comité des programmes adaptés de l'Association Canadienne pour la santé, l'éducation physique et la récréation d'entreprendre une étude nationale sur le processus d'intégration des handicapés physiques.

L'étude consiste à identifier des facteurs qui facilitent ou empêchent l'intégration des élèves physiquement handicapés au programme régulier d'éducation physique. Le ministère de l'Education est très intéressé à l'identification de ces facteurs.

Votre école est l'une des 3000 écoles sélectionnées à travers le Canada. Nous sollicitons votre aide et celle de votre personnel en répondant au questionnaire préparé par l'équipe de recherche.

Nous vous remercions pour votre coopération.

Clarence Cormier
CLARENCE CORMIER
Ministre de l'Education

Appendix D

Follow-up Postcards

CAHPER ACSEPR

THE CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION
L'ASSOCIATION CANADIENNE POUR LA SANTE, L'EDUCATION PHYSIQUE ET LA RECREATION

Dear Administrator:

Last week you received questionnaires seeking information about integration of physically disabled students in physical education. Your school was drawn in a random sample of schools across Canada.

If you have already completed and returned the questionnaires to us please accept our sincere thanks. If not we would appreciate it if you could do so today. The questionnaires have been sent to only a small but representative, sample of Canadian schools. Therefore, it is extremely important that yours also be included in the study if results are to accurately represent schools across Canada.

If by some chance you did not receive the questionnaire or it has been misplaced, please mail this card back to us and we will send a questionnaire to you immediately.

Sincerely,

E. J. Watkinson
Project Coordinator
Department of Physical Education and Sport Studies
University of Alberta
Edmonton, Alberta
T6G 2H9

Cher administrateur,
Chère administratrice,

Il y a environ une semaine vous avez reçu(e) des questionnaires spécifiquement construits pour recueillir de l'information au sujet de l'intégration d'étudiants(es) physiquement handicapés(es) en éducation physique. Votre école fut choisie au hasard parmi l'ensemble des écoles du Canada.

Si vous avez déjà rempli et retourné les questionnaires, veuillez accepter nos sincères remerciements. Sinon, nous vous serions reconnaissant de le faire le plus tôt possible. Les questionnaires ont été expédiés à un nombre relativement restreint, mais représentatif, d'écoles du Canada. Conséquemment, il est très important que les résultats en provenance de votre institution soient inclus dans l'étude. Votre coopération est nécessaire pour assurer la validité des résultats.

Si, par hasard, vous n'avez pas reçu les questionnaires, ou qu'ils ont été égarés, veuillez s'il vous plaît nous retourner la carte ci-jointe et nous vous enverrons les questionnaires sans délai.

Dans l'attente de vos nouvelles veuillez recevoir, Monsieur/Madame, l'expression de mes sentiments distingués.

E. J. Watkinson
Coordonnatrice du projet
Département d'éducation physique et d'étude du sport
Université d'Alberta
Edmonton, Alberta
T6G 2H9

Appendix E

Follow-up Letters

cahper acsepr

THE CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION
L'ASSOCIATION CANADIENNE POUR LA SANTÉ, L'ÉDUCATION PHYSIQUE ET LA RÉCRÉATION

May 24, 1984

Dear

Thank you for returning our postcard indicating that you had not received our questionnaires. These questionnaires were developed for the Adapted Programs Committee of the Canadian Association for Health Physical Education and Recreation (C.A.H.P.E.R.) who has been commissioned by Fitness and Amateur Sport to conduct a nation-wide survey to investigate the integration process and its ramifications.

Your school is one of a small number of schools chosen randomly from across Canada. In these schools administrators and teachers are being asked to share information and opinions on the integration of physically disabled students in physical education. In order that the results will truly represent the thinking of the principals and teachers in your province, it is important that each questionnaire be completed and returned.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so we may check your school off the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire.

Thank you for your assistance.

Sincerely,

E.J. Watkinson, Ph.D.
Project Coordinator
Department of Physical Education
& Sport Studies
University of Alberta
Edmonton, Alberta T6G 2H9

JW/sl

P.S. Please fill out questionnaires regardless whether or not you have physically disabled students.

333 RUE RIVER ROAD, OTTAWA (VANIER), ONTARIO K1L 8H9
TELEPHONE (613) 746-0060 (260 or/ou 261) or/ou 746-5909

cahper acsepr

THE CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION
L'ASSOCIATION CANADIENNE POUR LA SANTÉ, L'ÉDUCATION PHYSIQUE ET LA RÉCRÉATION

May 22, 1984

Dear Administrator:

Approximately three weeks ago questionnaires were sent to your school seeking information about the integration of physically disabled students in physical education classes. We received your administrator's questionnaire but did not receive the teacher's questionnaire.

Enclosed is a teacher's questionnaire which should be filled out by one teacher in your school in the following preference:

1. Any teacher who instructs physical education to a class which contains both physically disabled and non-disabled students.

2. A physical education teacher.

3. A classroom teacher who teaches physical education.

4. Any teacher who instructs physical education to only physically disabled students.

Your school is one of a small number drawn in a random sample of schools across Canada. In order for the results to be interpreted it is important that both the teacher's and administrator's questionnaires be completed.

Your cooperation is greatly appreciated.

Yours sincerely,

E.J. Watkinson
Project Coordinator

EJW/sl

333 RUE RIVER ROAD, OTTAWA (VANIER), ONTARIO K1L 8H9
TELEPHONE (613) 746-0060 (260 or/ou 261) or/ou 746-5909

THE CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION
L'ASSOCIATION CANADIENNE POUR LA SANTÉ, L'ÉDUCATION PHYSIQUE ET LA RÉCRÉATION

Dear Administrator:

Approximately three weeks ago questionnaires were sent to your school seeking information about the integration of physically disabled students in physical education classes. As of today we have not yet received your completed questionnaires.

The C.A.H.P.E.R. Adapted Programs Committee has undertaken this study because of the belief that administrator and teacher opinions should be taken into account in the formation of policies for the integration of disabled students into regular school physical education programs.

I am writing to you again because of the significance each questionnaire adds to the usefulness of the study. Your school is one of a small number drawn in a random sample of schools across Canada. In order that the results will truly represent the thinking of the principals and teachers in your province, it is important that each questionnaire be completed and returned.

In the event that your questionnaires have been misplaced, replacement questionnaires are enclosed.

Your cooperation is greatly appreciated.

Yours sincerely,

Jane Watkinson

E.J. Watkinson, Ph.D.
Project Coordinator
Department of Physical Education
and Sport Studies
University of Alberta
Edmonton, Alberta
T6G 2H9

/sl

P.S. Please fill out questionnaires regardless whether or not you have physically disabled students.

Appendix F

Code Book

CODEBOOK

Nationwide Survey of Administrators and Teachers Investigating the Mainstreaming Students with Physical Disabled into Regular School Physical Education Programs

Prepared by: Jane Watkinson, Ph.D.
Lloyd Bentz

GENERAL INSTRUCTIONS

1. Use a dark H.B. pencil to fill in the data coding sheet.

2. The number of the response category should be first written above the column and then the appropriate circle representing the answer should be shaded in.

3. There should be only one response circle per column shaded in.

4. The response circles should be completely filled in with caution to not spill over.

5. In all cases the administrators questionnaire should be coded first then the teachers.

6. All answer categories which have no response (missing values) should be coded as 0 and the appropriate circle shaded in.

7. If single response questions have more than one answer circled code them as N.R.

8. If an administrator identifies his/her school as not having any physically disabled students then questions 9 to 12 inclusive on the administrators questionnaire should be coded 9. N.A. (Not Applicable).

9. If a teachers does not currently have any phyiscally disabled students in his/her physical education class questions 8 to 17 inclusive on the teachers questionnaire 9. N.A. (Not Applicable).

10. All columns should be filled in unless either the administrators or teachers questionnaires were not returned.

ABBREVIATIONS

DK - Don't know
NA - Not applicable
NR - No reply
SD - Strongly disagree
DN - Does Not Participate
NAR - Non Active Role
F - Participates Fully
SA - Strongly agree
A - Agree
D - Disagree
U - Uncertain
AO - Participates as Observer
AR - Active Role
C - Combination

ADMINISTRATOR'S QUESTIONNAIRE

Specific Directions

	COLUMN	
VAR 001 ROW 1	1-5	Code Administrator's Questionnaire Number.
VAR 002 ROW 1	6	Code Kind of Questionnaire 1. Administrators' 2. Teachers'
VAR 003 ROW 1	7	Code Type of Questionnaire Was Received 1. Initial mail out 2. Follow-up 0. N.R. (No Reply)
VAR 004 ROW 1	8	1) Code Type of School (READ OTHER FOR PLACEMENT) 1. Regular school with no physically disabled students 2. Regular school with physically disabled students attending regular classes 3. Regular school with a special class for physically disabled students 4. Special school for physically disabled students 5. Other 0. NR (No reply)
VAR 005 ROW 1	9	2) Code Grades Offered in School 1. Elementary (K to 6) 2. Secondary (7 to 13) 3. Both Elementary and Secondary 4. Vocational 5. Special School For Disabled Students Only 6. Other 0. NR (No reply)
VAR 006 ROW 1	10	3) Code Total Number of Students in the School 1. 1-199 2. 200-399 3. 400-599 4. 600-999 5. 1,000-1,499 6. Over 1,500 0. NR (No reply)

VAR 007 ROW 1	11	4) Code Population 1. 1-999 2. 1,000-9,999 3. 10,000-99,999 4. 100,000-499,999 5. Over 500,000 0. NR (No reply)
Page 3	Question 5	- Architechural Barriers (Indoor)
VAR 008 ROW 1	12	1. Stairs but no ramp (School) 0. NR (No reply)
VAR 009 ROW 1	13	1. Multi storied school 0. NR (No reply)
VAR 010 ROW 1	14	1. No wheelchair access (Washrooms) 0. NR (No reply)
VAR 011 ROW 1	15	1. Stairs but no ramp (Gym) 0. NR (No reply)
VAR 012 ROW 1	16	1. No wheelchair access (Lockers) 0. NR (No reply)
VAR 013 ROW 1	17	1. Other 0. NR (No reply)
VAR 014 ROW 1	18	1. None 0. NR (No reply)
Page 3	Question 6	- Architectural Barriers (Outdoor)
VAR 015 ROW 1	19	1. Steps or curbs to play areas 0. NR (No reply)
VAR 016 ROW 1	20	1. Soft surfaces for access 0. NR (No reply)
VAR 017 ROW 1	21	1. No hard open surfaces for play 0. NR (No reply)
VAR 018 ROW 1	22	1. Other 0. NR (No reply)
VAR 019 ROW 1	23	1. None 0. NR (No reply)
VAR 020 ROW 1	24	7) Do You Have Physically Disabled Students? 1. Yes 2. No 0. NR (No reply)

VAR 021 ROW 1	25-26	8) Number of Physically Disabled Students. Code Actual Number 97.97 + students 98.DK (Don't know) 99.NA (Not applicable) 00.NR (No reply)
Page 3	Question 9	- Type of Class Attended
VAR 022 ROW 1	27	1. Regular physical education class 9. NA 0. NR
VAR 023 ROW 1	28	1. Special physical education class offered in this school 9. NA 0. NR
VAR 024 ROW 1	29	1. Special physical education class offered in another school or agency 9. NA 0. NR
VAR 025 ROW 1	30	1. Academic classes 9. NA 0. NR
VAR 026 ROW 1	31	1. Other activities instead of physical education 9. NA 0. NR
Page 4	Ouestion 10	- Special Funds Related to Physically Disabled Students
VAR 027 ROW 1	32	1. Funds for modifying facilities 9. NA 0. NR
VAR 028 ROW 1	33	1. Funds for special equipment 9. NA 0. NR
VAR 029 ROW 1	34	1. Funds for support personnel 9. NA 0. NR
VAR 030 ROW 1	35	1. Funds for inservice training 9. NA 0. NR
VAR 031 ROW 1	36	1. Other 9. NA 0. NR

VAR 032 ROW 1 37

1. No funds received
9. NA
0. NR

VAR 033 ROW 1 38

11) Code Attitude of the Parents of Non-Disabled Students
1. Favour integration
2. Favour segregated classes
3. Favour segregated schools
4. DK
9. NA
0. NR

VAR 034 ROW 1 39

12) Code Attitude of the Parents of Physically Disabled Students
1. Favour integration
2. Favour segregated classes
3. Favour exemption
4. DK
9. NA
0. NR

VAR 035 ROW 1 40

13) Code Principals Attitude Toward Integration
1. Favour complete integration
2. Favour special class
3. Favour special schools
4. Don't know
0. NR

TEACHER'S QUESTIONNAIRE

	COLUMN	
VAR 036 ROW 2	1-5	Code Teacher's Questionnaire Number
VAR 037 ROW 2	6	Code Kind of Questionnaire 1. Administrators 2. Teachers
VAR 038 ROW 2	7	Code Type of Questionnaire Was Received 1. Initial mail out (with physical education) 2. Follow-up (with physical education) 3. Initial mail out (no physical education offered) 4. Follow-up (no physical education offered) 0. NR (No reply)
VAR 039 ROW 2	8	1) Taught Physical Education to Physically Disabled Students 1. Yes 2. No 0. NR (No reply)
VAR 040 ROW 2	9	2) Feeling Prepared to Teach Physical Education to Physically Disabled Students 1. Well prepared 2. Moderately prepared 3. Inadequately prepared 4. Don't know 0. NR
VAR 041 ROW 2	10	3a) University Course Dealing With Disabled Individuals 1. Yes 2. No 0. NR
VAR 042 ROW 2	11	3b) Course in Physical Education 1. Yes 2. No 3. NA 0. NR
VAR 043 ROW 2	12	4) Participation in Workshops or Seminars in Adapted Physical Education 1. Yes 2. No 0. NR

VAR 044 ROW 2 13 5) Percentage of Instructional Time in Physical Education
1. 20% or less
2. 21% to 40%
3. 41% to 80%
4. 81% to 100%
0. NR

Page 4 Question 6 - Teacher Attitudes Toward Integration

VAR 045 ROW 2 14 6a) Physically Disabled Students Should be Required to Take Physical Education
1. SA (Strongly Agree)
2. A (Agree)
3. D (Disagree)
4. SD (Strongly Disagree)
5. U (Uncertain)
0. NR

VAR 046 ROW 2 15 6b) Physically Disabled Children do not like Physical Education
1. SA
2. A
3. D
4. SD
5. U
0. NR

VAR 047 ROW 2 16 6c) The Physical Fitness of the Physically Disabled Students can be Improved
1. SA
2. A
3. D
4. SD
5. U
0. NR

VAR 048 ROW 2 17 6d) The Safety of a Physically Disabled Student is at Risk in a Physical Education Class
1. SA
2. A
3. D
4. SD
5. U
0. NR

VAR 049 ROW 2 18

6e) It is Difficult to Assess the Skills and Abilities of a Physically Disabled Student
1. SA
2. A
3. D
4. SD
5. U
0. NR

VAR 050 ROW 2 19

6f) Physically Disabled Students Would Benefit More From Attending Academic Classes
1. SA
2. A
3. D
4. SD
5. U
0. NR

VAR 051 ROW 2 20

6g) The Safety of the Non Disabled Student is at Risk
1. SA
2. A
3. D
4. SD
5. U
0. NR

VAR 052 ROW 2 21

6h) Physically Disabled Students Would Benefit More From Placement in Special Schools
1. SA
2. A
3. D
4. SD
5. U
0. NR

VAR 053 ROW 2 22

6i) It is Difficult for Non Disabled Students to Benefit Maximally When a Physically Disabled Student is Present
1. SA
2. A
3. D
4. SD
5. U
0. NR

VAR 054 ROW 2 23

6j) It is Difficult to Choose Activities That Benefit Both Types of Students
1. SA
2. A
3. D
4. SD
5. U
0. NR

VAR 055 ROW 2 24

6k) I Feel Uneasy About Dealing With Special Medical Problems That May Arise
1. SA
2. A
3. D
4. SD
5. U
0. NR

VAR 056 ROW 2 25

6l) I Feel That Physically Disabled Students Need Skill and Fitness Upgrading
1. SA
2. A
3. D
4. SD
6. U
0. NR

VAR 057 ROW 2 26

6m) Physically Disabled Students Need too Much Time and Attention
1. SA
2. A
3. D
4. SD
5. U
0. NR

VAR 058 ROW 2 27

6n) It is not the job of a Regular Physical Education Teacher to Instruct Physically Disabled Students
1. SA
2. A
3. D
4. SD
5. U
0. NR

VAR 059 ROW 2 28 6o) Physically Disabled Students Would Benefit More From Placement in Special Physical Education Classes
1. SA
2. A
3. D
4. SD
5. U
0. NR

VAR 060 ROW 2 29 7) Do You Currently Have Any Physically Disabled Students?
1. Yes
2. No
0. NR

Page 5 Question 8 - Special Equipment Used For Mobility

VAR 061 ROW 2 30 8-1) Brace(s)?
1. Yes
9. NA
0. NR

VAR 062 ROW 2 31 8-2) Cane or Crutches?
1. Yes
9. NA
0. NR

VAR 063 ROW 2 32 8-3) Walker?
1. Yes
9. NA
0. NR

VAR 064 ROW 2 33 8-4) Artificial Limb?
1. Yes
9. NA
0. NR

VAR 065 ROW 2 34 8-5) Electric Wheelchair?
1. Yes
9. NA
0. NR

VAR 066 ROW 2 35 8-6) Manual Wheelchair?
1. Yes
9. NA
0. NR

VAR 067 ROW 2 36 8-7) Other?
1. Yes
9. NA
0. NR

VAR 068 ROW 2 37 8-8) None Used?
1. Yes
9. NA
0. NR

VAR 069 ROW 2 38 8-9) If a Manual Wheelchair is Used is it Specifically Designed?
1. Yes
2. No
3. Don't know
9. NA
0. NR

Page 5 Question 9 - Participation of Physically Disabled Students

VAR 070 ROW 2 39 9-1) Does all the Same Activities as the Other Students
1. Yes
9. NA
0. NR

VAR 071 ROW 2 40 9-2) Does Some of the Same Activities as the Other Students
1. Yes
9. NA
0. NR

VAR 072 ROW 2 41 9-3) Participates in a Special Physical Education Class
1. Yes
9. NA
0. NR

VAR 073 ROW 2 42 9-4) Attends but does not Participate
1. Yes
9. NA
0. NR

VAR 074 ROW 2 43

9-5) Does not Participate in Physical Education
1. Yes
9. NA
0. NR

VAR 075 ROW 2 44

10) Type of Support Personnel Available
1. Paid
2. Volunteer
3. Both
4. None
9. NA
0. NR

VAR 076 ROW 2 45

11) Are There Program Materials Conveniently Available
1. Yes
2. No
3. Don't know
9. NA
0. NR

VAR 077 ROW 3 1

12) Are There Any Consultants Available
1. Yes
2. No
3. Don't know
9. NA
0. NR

Page 6 Question 13 - Participation in Extracurricular Program

VAR 078 ROW 3 2

13-1) Participates in Regular Recreational Programs
1. Yes
9. NA
0. NR

VAR 079 ROW 3 3

13-2) Participates in Regular Intramural Programs
1. Yes
9. NA
0. NR

VAR 080 ROW 3 4

13-3) Participates in Regular Interschool Programs
1. Yes
9. NA
0. NR

VAR 081 ROW 3 5 13-4) Participates in Special Extracurricular Programs
1. Yes
9. NA
0. NR

VAR 082 ROW 3 6 13-5) Does not Participate
1. Yes
9. NA
0. NR

Page 6 Question 14 - Involvement of the Parents of Disabled Students

VAR 083 ROW 3 7 14-1) Seek Information on Students Progress
1. Yes
9. NA
0. NR

VAR 084 ROW 3 8 14-2) Requested Exemption From Physical Education
1. Yes
9. NA
0. NR

VAR 085 ROW 3 9 14-3) Requested Participation in Physical Education
1. Yes
9. NA
0. NR

VAR 086 ROW 3 10 14-4) Provided Information in Past Activities
1. Yes
9. NA
0. NR

VAR 087 ROW 3 11 14-5) Provided Information on Resources
1. Yes
9. NA
0. NR

VAR 088 ROW 3 12 14-6) Provided Information on Student's Disability
1. Yes
9. NA
0. NR

VAR 089 ROW 3 13 14-7) Other
1. Yes
9. NA
0. NR

VAR 090 ROW 3 14 14-8) No Parental Involvement
1. Yes
9. NA
0. NR

VAR 091 ROW 3 15 15a) Are Your Physically Disabled Students Assessed?
1. Yes
2. No
3. Don't know
9. NA
0. NR

Page 6 Question 15b) - Kind of Assessment

VAR 092 ROW 3 16 15-1) Medical
1. Yes
9. NA
0. NR

VAR 093 ROW 3 17 15-2) Fitness
1. Yes
9. NA
0. NR

VAR 094 ROW 3 18 15-3) Skill
1. Yes
9. NA
0. NR

VAR 095 ROW 3 19 15-4) Other (Record These)
1. Yes
9. NA
0. NR

VAR 096 ROW 3 20 16) Behavior of the Majority of Non Disabled Students
1. Seeks positive interactions
2. Promotes negative interactions
3. Tolerates but does not initiates interations
4. Avoids interactions
5. There is no interaction
9. NA
0. NR

Page 7 Question 17 - Participation of Physically Disabled Students

VAR 097 ROW 3 21 17-1) Aquatics
1. DN (Does Not Participate)
2. AO (Participates as Observer)
3. NAR (Non Active Role)
4. A (Active Role)
5. F (Participates Fully)
6. C (Combination)
9. NA
0. NR

VAR 098 ROW 3 22 17-2) Archery
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 099 ROW 3 23 17-3) Basketball
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 100 ROW 3 24 17-4) Badminton
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 101 ROW 3 25 17-5) Bowling
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 102 ROW 3 26 17-6) Childrens Games
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 103 ROW 3 27 17-7) Climbing Activities
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 104 ROW 3 28 17-8) Curling
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 105 ROW 3 29 17-9) Dance
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 106 ROW 3 30 17-10) Field Hockey
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 107 ROW 3 31 17-11) Fitness Activites
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 108 ROW 3 32 17-12) Floor Hockey
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 109 ROW 3 33 17-13) Football
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 110 ROW 3 34 17-14) Golf
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 111 ROW 3 35 17-15) Gymnastics
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 112 ROW 3 36 17-16) Handball
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 113 ROW 3 37 17-17) Ice Hockey
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 114 ROW 3 38 17-18) Outdoor Skills
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 115 ROW 3 39 17-19) Skating
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 116 ROW 3 40 17-20) Skiing
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 117 ROW 3 41 17-21) Soccer
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 118 ROW 3 42 17-22) Softball/baseball
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 119 ROW 3 43 17-23) Tennis
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 120 ROW 3 44 17-24) Track Events
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 121 ROW 3 45

17-25) Field Events
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 122 ROW 4 1

17-26) Volleyball
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 123 ROW 4 2

17-27) Weight Lifting
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 124 ROW 4 3

17-28) Wrestling
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 125 ROW 4 4

17-29) Other (specify)
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 126 ROW 4 5

17-30) Other (specify)
1. DN
2. AO
3. NAR
4. AR
5. F
6. C
9. NA
0. NR

VAR 127 ROW 4 6

18) What is Your Gender?
1. Male
2. Female
0. NR

VAR 128 ROW 4 7

19) Do You Have a Physical Education or Equivalent Degree?
1. Yes
2. No
0. NR

VAR 129 ROW 4 8

20) How Many Physical Education Courses Did You Take?
1. None
2. 1 to 8
3. 9 to 18
4. 19 or more
5. Don't know
0. NR

VAR 130 ROW 4 9

21) How Many Years of Teaching Experience Do You Have?
1. Less than 1
2. 1 to 4
3. 5 to 9
4. 10 or more
0. NR

Appendix G

French Cover Letters

and

Questionnaires

THE CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION
L'ASSOCIATION CANADIENNE POUR LA SANTÉ, L'ÉDUCATION PHYSIQUE ET LA RÉCRÉATION

Cher administrateur,
Chère administratrice,

Depuis environ une dizaine d'années nous retrouvons à l'intérieur de différents systèmes d'éducation en Amérique du Nord une tendance marquée vers l'intégration des personnes handicapées. Depuis le début de ce mouvement il n'y a pratiquement pas eu d'études cherchant à évaluer les progrès réalisés en regard à l'intégration de ces personnes à l'intérieur des programmes réguliers d'activité physique offerts dans nos écoles. La division éducation physique adaptée de l'Association canadienne pour la santé, l'éducation physique et la récréation (A.C.S.E.P.R.) a été mandatée par l'organisme Condition physique et sport amateur pour conduire une enquête à l'intérieur du Canada portant sur le processus d'intégration et ses ramifications.

Pour atteindre cet objectif, nous avons choisi aléatoirement un petit nombre d'écoles à travers le Canada; votre école fait partie de ce groupe. Dans chaque institution retenue, nous demandons à un administrateur et à un enseignant de nous fournir des renseignements et des opinions au sujet de l'intégration des étudiants(es) handicapés(es) physiquement en éducation physique. Pour que les résultats représentent véritablement les opinions des directeurs et des professeurs dans votre province, il est important que chaque questionnaire soit complété et retourné. Nous avons l'ordre de préférence suivant au sujet de la personne qui doit remplir le questionnaire du professeur dans votre école:

1. N'importe quel professeur qui enseigne l'éducation physique à une classe composée d'étudiants handicapés physiquement et d'étudiants non-handicapés.

2. Un éducateur physique.

333 RUE RIVER ROAD, OTTAWA (VANIER), ONTARIO K1L 8H9
TELEPHONE (613) 746-0060 (260 or/ou 261) or/ou 746-5909

3. Un professeur de matières académiques qui enseigne l'éducation physique.

4. N'importe quel professeur qui enseigne l'éducation physique à des groupes composés uniquement d'étudiants(es) handicapés(es) physiquement.

Nous vous assurons de l'entière confidentialité des résultats. Chaque questionnaire à un numéro d'identification que nous utiliserons seulement pour connaître le déroulement de l'enquête. Votre nom ne doit pas apparaître sur le questionnaire.

Condition physique et sport amateur ainsi que l'A.C.S.E.P.R. rendront disponibles les résultats de cette recherche dès que possible.

Si vous désirez de plus amples renseignements au sujet de cette étude, n'hésitez pas à m'écrire ou communiquez avec moi. Je serai très heureuse de répondre à vos questions.

Dans l'attente de vos réponses, veuillez agréer, Monsieur/Madame, l'expression de mes sentiments distingués.

Jane Watkinson

J.J. Watkinson
Coordonnatrice du projet
Département d'éducation physique
et d'étude du sport
Université d'Alberta
Edmonton, Alberta
T6G 2H9

JW/fgb
P.J.

INTEGRATION: UN SONDAGE NATIONAL D'ADMINISTRATEURS ET D'ENSEIGNANTS AU SUJET DE L'INTEGRATION D'ETUDIANTS PHYSIQUEMENT HANDICAPES DANS LES PROGRAMMES REGULIERS D'EDUCATION PHYSIQUE A L'ECOLE.

QUESTIONNAIRE DE L'ADMINISTRATEUR

Une étude parrainée conjointement
par

L'Association canadienne pour la santé, l'éducation physique et la récréation

et

Condition physique et sport amateur

A.C.S.E.P.R. Comité des programmes adaptés
Département d'éducation physique et d'étude du sport
Université d'Alberta
Edmonton, Alberta
T6G 2H9

QUESTIONNAIRE DE L'ADMINISTRATEUR

Ce questionnaire doit être complété par une personne qui occupe un poste administratif dans l'école (directeur ou directeur-adjoint).

DEFINITIONS

Handicapé physique

Au sens de cette étude le terme handicapé physique désigne toute personne ayant une diminution, permanente ou de longue durée, de la mobilité. Ces personnes peuvent avoir besoin ou non d'équipement spécial pour se mouvoir tel que canne(s), béquille(s), "appareil aide-marche", chaise roulante manuelle ou électrique. Inclus dans cette définition on peut retrouver des personnes qui souffrent de paralysie cérébrale, de dystrophie musculaire, de spina-bifida, d'amputation, de lésion de la moelle épinière ou d'autres conditions affectant la mobilité. Dans cette étude le terme handicapé physique ne comprend pas des personnes en train de se remettre d'affections médicales temporaires (e.g., fractures). Les personnes qui souffrent d'affaiblissement de l'ouïe, de la vue, de déficience mentale, ou de tout autre handicap physique qui n'affecte pas la mobilité ne sont pas l'objet de cette étude.

Ecole régulière

Le terme école régulière désigne des écoles académiques et/ou professionnelles.

QUESTIONS

1. Laquelle des phrases suivantes décrit votre école de la meilleure façon possible? (Encerclez le numéro de votre réponse)

   1. EST UNE ECOLE REGULIERE SANS ETUDIANTS PHYSIQUEMENT HANDICAPES.
   2. EST UNE ECOLE REGULIERE AYANT DES ETUDIANTS PHYSIQUEMENT HANDICAPES INTEGRES A L'INTERIEUR DES CLASSES REGULIERES.
   3. EST UNE ECOLE REGULIERE AVEC CLASSES SPECIALES POUR LES ETUDIANTS PHYSIQUEMENT HANDICAPES.
   4. EST UNE ECOLE SPECIALE POUR ETUDIANTS PHYSIQUEMENT HANDICAPES.
   5. AUTRE (PRECISEZ)_____

      _____

2. Veuillez indiquer quelles années académiques sont offertes à l'intérieur de votre école.

_____

3. Quel est le nombre total d'étudiants inscrits à votre école? (Encerclez le numéro de votre réponse)

1. 1-199
2. 200-399
3. 400-599
4. 600-999
5. 1 000-1 499
6. PLUS DE 1 500

4. Votre école est située dans un centre de population de: (Encerclez le numéro de votre réponse)

1. 1-999
2. 1 000-9 999
3. 10 000-99 999
4. 100 000-499 999
5. PLUS DE 500 000 HABITANTS

5. Quelles sont les conditions architecturales de votre école qui peuvent être des obstacles pour les personnes physiquement handicapées? (Encerclez tous les numéros appropriés)

1. ESCALIER MAIS PAS DE RAMPE A L'ENTREE DE L'ECOLE.
2. ECOLE A PLUSIEURS ETAGES SANS ASCENSEUR.
3. PAS D'ACCES POUR LES CHAISES ROULANTES AUX CABINETS DE TOILETTE.
4. ESCALIER MAIS PAS DE RAMPE A L'ENTREE DU GYMNASE.
5. PAS D'ACCES POUR LES CHAISES ROULANTES AUX VESTIAIRES OU AUX DOUCHES.
6. AUTRE (PRECISEZ)_____

_____

7. AUCUNE.

6. Sur le terrain extérieur de votre école quelles sont les conditions architecturales qui peuvent être des obstacles aux activités des étudiants physiquement handicapés? (Encerclez tous les numéros appropriés)

1. MARCHES OU REBORDS ENTOURANT LES AIRES DE JEU.
2. DES SURFACES MOLLES CONDUISENT AUX AIRES DE JEU.
3. PAS DE SURFACE EXTERIEURE DURE POUR JOUER.
4. AUTRE (PRECISEZ)_____
5. AUCUNE.

7. Avez-vous des étudiants physiquement handicapés (c'est-à-dire ayant une capacité diminuée de se déplacer) dans votre école? (Encerclez OUI si vous en avez un ou plus)

   1. OUI ——→ ALLEZ A LA QUESTION 8.
   2. NON ——→ ALLEZ A LA QUESTION 13.

8. Quel est le nombre d'étudiants physiquement handicapés dans votre école?_____

9. Ces étudiants physiquement handicapés assistent: (Encerclez tous les numéros appropriés)

   1. AUX CLASSES REGULIERES D'EDUCATION PHYSIQUE.
   2. AUX CLASSES D'EDUCATION PHYSIQUE ADAPTEE OFFERTES AUX ETUDIANTS HANDICAPES PHYSIQUE DE NOTRE ECOLE.
   3. AUX CLASSES D'EDUCATION PHYSIQUE ADAPTEE OFFERTES AUX ETUDIANTS PHYSIQUEMENT HANDICAPES DANS UNE AUTRE ECOLE OU AGENCE.
   4. A DES COURS ACADEMIQUES A LA PLACE DES COURS D'EDUCATION PHYSIQUE.
   5. A D'AUTRES ACTIVITES A LA PLACE DES COURS D'EDUCATION PHYSIQUE. (Précisez)

      _____

      _____

10. Dans quel but(s) avez-vous reçu des fonds spéciaux pour les étudiants physiquement handicapés de votre école? (Encerclez tous les numéros appropriés)

    1. POUR MODIFIER LES AMENAGEMENTS POUR LES PERSONNES PHYSIQUEMENT HANDICAPEES.
    2. POUR ACHETER DU MATERIEL SPECIAL POUR LES COURS D'EDUCATION PHYSIQUE OFFERTS AUX ETUDIANTS PHYSIQUEMENT HANDICAPES.
    3. POUR EMPLOYER DU PERSONNEL DE SOUTIEN POUR LES PERSONNES HANDICAPEES PHYSIQUEMENT.
    4. POUR OFFRIR DU RECYCLAGE AUX PROFESSEURS TRAVAILLANT AVEC LES HANDICAPES PHYSIQUE.
    5. AUTRE (Précisez).____

       _____

    6. ON N'A PAS RECU DE FONDS.

11. Comment décririez-vous l'attitude de la plupart des parents d'étudiants non-handicapés? (Encerclez le numéro de votre réponse).

1. ILS SONT PARTISANS DE L'INTEGRATION DES ETUDIANTS HANDICAPES PHYSIQUEMENT.
2. ILS SONT PARTISANS DE CLASSES PARTICULIERES, SEPAREES, POUR LES ETUDIANTS HANDICAPES PHYSIQUEMENT.
3. ILS SONT PARTISANS D'ECOLES PARTICULIERES, SEPAREES, POUR LES ETUDIANTS HANDICAPES PHYSIQUEMENT.
4. JE NE SAIS PAS.

12. Comment décririez-vous l'attitude de la plupart des parents d'étudiants handicapés physiquement? (Encerclez le numéro de votre réponse).

1. ILS SONT PARTISANS DE L'INTEGRATION EN EDUCATION PHYSIQUE.
2. ILS SONT PARTISANS DE CLASSES PARTICULIERES, SEPAREES, EN EDUCATION PHYSIQUE.
3. ILS SONT PARTISANS DE L'EXEMPTION DES ETUDIANTS HANDICAPES PHYSIQUEMENT DE L'EDUCATION PHYSIQUE.
4. JE NE SAIS PAS.

13. Comment décririez-vous votre attitude en ce qui concerne le placement des étudiants handicapés physiquement dans le système scolaire? (Encerclez le numéro de votre réponse).

1. JE SUIS PARTISAN DE L'INTEGRATION COMPLETE DES ETUDIANTS HANDICAPES PHYSIQUEMENT.
2. JE SUIS PARTISAN DE CLASSES SPECIALES POUR LES ETUDIANTS HANDICAPES PHYSIQUEMENT A L'INTERIEUR DE L'ECOLE REGULIERE.
3. JE SUIS PARTISAN D'ECOLES PARTICULIERES POUR LES ETUDIANTS HANDICAPES PHYSIQUEMENT.
4. JE NE SAIS PAS.

MERCI DE VOTRE TEMPS ET DE VOTRE COOPERATION.

Lorsque complété, veuillez retourner ce questionnaire en même temps que celui de l'enseignant à l'adresse suivante:

A.C.S.E.P.R. Comité des programmes adaptés
ATTENTION: E. J. WATKINSON
Département d'éducation physique
& d'étude du sport
Université d'Alberta
Edmonton, Alberta
T6G 2H9

THE CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION
L'ASSOCIATION CANADIENNE POUR LA SANTÉ, L'ÉDUCATION PHYSIQUE ET LA RÉCRÉATION

Cher enseignant,
Chère enseignante,

Depuis environ une dizaine d'années nous retrouvons à l'intérieur de différents systèmes d'éducation en Amérique du Nord une tendance marquée vers l'intégration des personnes handicapées. Depuis le début de ce mouvement il n'y a pratiquement pas eu d'études cherchant à évaluer les progrès réalisés en regard à l'intégration de ces personnes à l'intérieur des programmes réguliers d'activité physique offerts dans nos écoles. La division éducation physique adaptée de l'Association canadienne pour la santé, l'éducation physique et la récréation (A.C.S.E.P.R.) a été mandatée par l'organisme Condition physique et sport amateur pour conduire une enquête à l'intérieur du Canada portant sur le processus d'intégration et ses ramifications.

Pour atteindre cet objectif, nous avons choisi aléatoirement un petit nombre d'écoles à travers le Canada; votre école fait partie de ce groupe. Dans chaque institution retenue, nous demandons à un administrateur et à un enseignant de nous fournir des renseignements et des opinions au sujet de l'intégration des étudiants(es) handicapés(es) physiquement en éducation physique. Pour que les résultats représentent véritablement les opinions des directeurs et des professeurs dans votre province, il est important que chaque questionnaire soit complété et retourné.

Nous vous assurons de l'entière confidentialité des résultats. Chaque questionnaire à un numéro d'identification que nous utiliserons seulement pour connaître le déroulement de l'enquête. Votre nom ne doit pas apparaître sur le questionnaire.

Condition physique et sport amateur ainsi que l'A.C.S.E.P.R. rendront disponibles les résultats de cette recherche dès que possible.

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333 RUE RIVER ROAD, OTTAWA (VANIER), ONTARIO K1L 8H9
TELEPHONE (613) 746-0060 (260 or/ou 261) or/ou 746-5909

Si vous désirez de plus amples renseignements au sujet de cette étude, n'hésitez pas à m'écrire ou communiquez avec moi. Je serai très heureuse de répondre à vos questions.

Dans l'attente de vos réponses, veuillez agréer, Monsieur/Madame, l'expression de mes sentiments distingues.

Jane Watkinson

E.J. Watkinson
Coordonnatrice du projet
Département d'éducation physique
et d'étude du sport
Université d'Alberta
Edmonton, Alberta
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/elv

INTEGRATION: UN SONDAGE NATIONAL D'ADMINISTRATEURS ET D'ENSEIGNANTS AU SUJET DE L'INTEGRATION D'ETUDIANTS PHYSIQUEMENT HANDICAPES DANS LES PROGRAMMES REGULIERS D'EDUCATION PHYSIQUE A L'ECOLE.

QUESTIONNAIRE DE L'ENSEIGNANT

Une étude parrainée conjointement
par

L'Association canadienne pour la santé, l'éducation physique et la récréation

et

Condition physique et sport amateur

A.C.S.E.P.R. Comité des programmes adaptés
Département d'éducation physique et d'étude du sport
Université d'Alberta
Edmonton, Alberta
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QUESTIONNAIRE DE L'ENSEIGNANT

DEFINITIONS

Handicapé physique

Au sens de cette étude le terme handicapé physique désigne toute personne ayant une diminution, permanente ou de longue durée, de la mobilité. Ces personnes peuvent avoir besoin ou non d'équipement spécial pour se mouvoir tel que canne(s), béquille(s), "appareil aide-marche", chaise roulante manuelle ou électrique. Inclus dans cette définition on peut retrouver des personnes qui souffrent de paralysie cérébrale, de dystrophie musculaire, de spina-bifida, d'amputation, de lésion de la moelle épinière ou d'autres conditions affectant la mobilité. Dans cette étude le terme handicapé physique ne comprend pas des personnes en train de se remettre d'affection médicales temporaires (e.g., fractures). Les personnes qui souffrent d'affaiblissement de l'ouïe, de la vue, de déficience mentale, ou de tout autre handicap physique qui n'affecte pas la mobilité ne sont pas l'objet de cette étude.

Ecole régulière

Le terme école régulière désigne des écoles académiques et/ou professionnelles.

QUESTIONS

1. Avez-vous déjà enseigné l'éducation physique à des étudiants physiquement handicapés? (Encerclez le numéro de votre réponse)

   1. OUI
   2. NON

2. Dans quelle mesure vous considérez-vous préparé à enseigner l'éducation physique à des étudiants physiquement handicapés? (Encerclez le numéro de votre réponse)

   1. BIEN PREPARE.
   2. MOYENNEMENT PREPARE.
   3. INSUFFISAMMENT PREPARE.
   4. JE NE SAIS PAS.

3. Avez-vous déjà suivi un cours universitaire traitant, en totalité ou en partie, des personnes handicapées physiquement? (Encerclez le numéro de votre réponse)

   1. OUI
   2. NON

   Si oui, est-ce que c'était un cours d'éducation physique? (Encerclez le numéro de votre réponse)

   1. OUI
   2. NON

4. Avez-vous pris part à des groupes de discussion ou des séminaires en éducation physique adaptée pendant les 5 dernières années? (Encerclez le numéro de votre réponse)

   1. OUI (Précisez le genre de groupe de discussion)

      _____

   2. NON

5. Quel pourcentage de votre temps d'enseignement passez-vous à enseigner l'éducation physique? (Encerclez le numéro de votre réponse)

   1. 20% OU MOINS
   2. 21% A 40%
   3. 41% A 60%
   4. 61% A 80%
   5. 81% A 100%

6. S'il vous plaît évaluez chacun des énoncés suivants et indiquez si vous: 1- êtes fortement d'accord, 2- êtes d'accord, 3- n'êtes pas d'accord, ou 4- n'êtes pas du tout d'accord. Répondez à cette question si vous avez des étudiants handicapés physiquement dans votre classe ou non. (Encerclez le numéro de votre réponse)

		JE SUIS FORTEMENT D'ACCORD	JE SUIS D'ACCORD	JE NE SUIS PAS D'ACCORD	JE NE SUIS PAS DU TOUT D'ACCORD
a)	On devrait exiger qu'un étudiant physiquement handicapé suive des cours d'éducation physique.	1	2	3	4
b)	Comparés avec les étudiants non-handicapés les enfants physiquement handicapés n'aiment pas l'éducation physique.	1	2	3	4
c)	La condition physique de l'étudiant physiquement handicapé peut être améliorée.	1	2	3	4
d)	La sécurité de l'étudiant physiquement handicapé est menacée dans une classe d'éducation physique.	1	2	3	4
e)	Il est difficile d'évaluer les habiletés et les capacités de l'étudiant physiquement handicapé.	1	2	3	4
f)	Les étudiants physiquement handicapés profiteraient plus de la fréquentation des classes académiques que de la fréquentation des classes d'éducation physique.	1	2	3	4
g)	La sécurité de l'étudiant non-handicapé est menacée si l'étudiant physiquement handicapé prend part aux classes régulières d'éducation physique.	1	2	3	4
h)	Les étudiants physiquement handicapés profiteraient plus du placement dans des classes particulières réservées aux étudiants handicapés seulement.	1	2	3	4
i)	Il est difficile pour les étudiants non-handicapés de profiter pleinement du cours d'éducation physique quand un étudiant physiquement handicapé fait partie de la classe.	1	2	3	4
j)	Il est difficile de choisir des activités qui sont avantageuses pour les étudiants physiquement handicapés ainsi que les non-handicapés dans une classe d'éducation physique.	1	2	3	4
k)	Je me sens mal à l'aise par rapport aux problèmes médicaux particuliers qui peuvent se produire quand un étudiant physiquement handicapé participe.	1	2	3	4
l)	Je crois que les étudiants physiquement handicapés ont besoin d'améliorer leurs habiletés et leur condition physique avant qu'ils soient intégrés dans les classes régulières d'éducation physique.	1	2	3	4
m)	Les étudiants physiquement handicapés ont besoin de trop de temps et d'attention dans une classe régulière d'éducation physique.	1	2	3	4
n)	Le rôle du professeur régulier d'éducation physique n'est pas d'enseigner aux étudiants physiquement handicapés.	1	2	3	4
o)	Les étudiants physiquement handicapés profiteraient plus du placement dans des classes particulières d'éducation physique réservées uniquement aux étudiants handicapés, plutôt que du placement dans les classes régulières d'éducation physique.	1	2	3	4

7. Avez-vous actuellement des étudiants physiquement handicapés (i.e., des enfants ou des adolescents ayant une mobilité réduite) dans votre classe d'éducation physique? (Encerclez OUI si vous en avez un ou plus)

   1. OUI ⟶ ALLEZ A LA QUESTION 8.
   2. NON ⟶ ALLEZ A LA QUESTION 18.

8. Quelle sorte d'appareil spécial est utilisé par votre (vos) étudiants pour se mouvoir en éducation physique? (Encerclez tous les numéros appropriés)

   1. ARMATURE(S) ORTHOPEDIQUE(S)
   2. CANNE(S) OU BEQUILLE(S)
   3. "APPAREIL AIDE-MARCHE" (WALKER)
   4. PROTHESE ORTHOPEDIQUE
   5. CHAISE ROULANTE ELECTRIQUE
   6. CHAISE ROULANTE MANUELLE
   7. AUTRE (Précisez)_____
   8. AUCUN APPAREIL SPECIAL N'EST UTILISE

   Si une chaise roulante manuelle est utilisée, est-elle construite spécialement pour l'activité physique (e.g., plus légère, dossier bas, petites roues pour les enfants plus jeunes)? (Encerclez le numéro de votre réponse)

   1. OUI
   2. NON
   3. JE NE SAIS PAS

9. Quelle phrases décrivent de la meilleure façon possible la participation en éducation physique des étudiants physiquement handicapés dans votre classe. (Encerclez tous les numéros appropriés)

   1. PREND PART A LA CLASSE REGULIERE D'EDUCATION PHYSIQUE ET FAIT TOUTES LES ACTIVITES PREVUES POUR LE GROUPE.
   2. PREND PART A LA CLASSE REGULIERE D'EDUCATION PHYSIQUE ET FAIT QUELQUES-UNES DES ACTIVITES PREVUES POUR LE GROUPE.
   3. PREND PART A UNE CLASSE PARTICULIERE D'EDUCATION PHYSIQUE POUR HANDICAPES PHYSIQUES.
   4. ASSISTE A LA CLASSE REGULIERE D'EDUCATION PHYSIQUE MAIS N'Y PARTICIPE PAS.
   5. NE PARTICIPE PAS A L'EDUCATION PHYSIQUE.

10. Quel genre de personnel de soutien est disponible pour vous aider pendant les classes d'éducation physique? (Encerclez le numéro de votre réponse)

1. RENUMERE
2. VOLONTAIRE
3. LES DEUX
4. AUCUN

11. Disposez-vous de guides pédagogiques qui peuvent vous aider à offrir un programme d'éducation physique pour les étudiants physiquement handicapés? (Encerclez le numéro de votre réponse)

1. OUI
2. NON
3. JE NE SAIS PAS

12. Avez-vous des conseillers pédagogiques pouvant vous aider à offrir un programme d'éducation physique pour les handicapés physiques? (Encerclez le numéro de votre réponse)

1. OUI
2. NON
3. JE NE SAIS PAS

13. Lequel des énoncés ci-dessous décrit (décrivent) le mieux la participation de l'étudiant (des étudiants) physiquement handicapés aux programmes parascolaires? (Encerclez tous les numéros appropriés)

1. PRENDS PART A DES PROGRAMMES REGULIERS DE RECREATION (DES CLUBS D'ACTIVITE PHYSIQUE)
2. PRENDS PART AUX PROGRAMMES REGULIERS INTRA-MURAUX.
3. PRENDS PART AUX PROGRAMMES REGULIERS INTERSCOLAIRES.
4. PRENDS PART AUX PROGRAMMES PARTICULIERS PARASCOLAIRES POUR ETUDIANTS PHYSIQUEMENT HANDICAPES.
5. NE PRENDS PAS PART.

14. Quelle phrase décrit le mieux la participation des parents d'étudiants physiquement handicapés? (Encerclez tous les numéros appropriés)

1. ILS CHERCHENT DES RENSEIGNEMENTS SUR LE PROGRES DE L'ETUDIANT EN EDUCATION PHYSIQUE.
2. ILS ONT DEMANDE QUE L'ETUDIANT HANDICAPE SOIT EXEMPTE DE L'EDUCATION PHYSIQUE.
3. ILS ONT DEMANDE QUE L'ETUDIANT HANDICAPE PRENNE PART A L'EDUCATION PHYSIQUE.
4. ILS ONT FOURNI DES RENSEIGNEMENTS SUR DES ACTIVITES PASSEES.
5. ILS ONT FOURNI DES RENSEIGNEMENTS SUR DES RESSOURCES.
6. ILS ONT FOURNI DES RENSEIGNEMENTS SUR LA NATURE DU HANDICAP DE L'ETUDIANT.
7. AUTRE (Précisez)_____
8. IL N'Y A PAS EU DE PARTICIPATION DES PARENTS.

15. Est-ce que vos étudiants physiquement handicapés sont évalués avant qu'ils débutent le programme d'éducation physique? (Encerclez le numéro de votre réponse)

1. OUI
2. NON
3. JE NE SAIS PAS

Si OUI, précisez le genre d'évaluation. (Encerclez tous les numéros appropriés)

1. MEDICALE
2. APTITUDE
3. HABILETE
4. AUTRE (Précisez)_____

16. Comment décririez-vous le comportement de la plupart des étudiants non-handicapés envers l'(es) étudiant(s) physiquement handicapé(s) dans votre école? (Encerclez le numéro de votre réponse)

1. ILS RECHERCHENT DES INTERACTIONS POSITIVES.
2. ILS ENCOURAGENT DES INTERACTIONS NEGATIVES.
3. ILS SUPPORTENT MAIS ILS N'ENCOURAGENT PAS DES INTERACTIONS.
4. ILS EVITENT LES INTERACTIONS.
5. IL N'Y A PAS D'INTERACTIONS.

17. S'il vous plaît encerclez le numéro de la catégorie qui reflète le mieux la participation de votre (vos) étudiant(s) physiquement handicapés aux activités suivantes dans les classes d'éducation physique. Omettez les activités qui ne sont pas offertes dans votre programme régulier d'éducation physique.

	NE PARTICIPE PAS	PARTICIPE COMME OBSERVATEUR	PARTICIPATION LIMITEE A UN ROLE PARTICULIER NON-ACTIF	PARTICIPATION LIMITEE A UN ROLE PARTICULIER ACTIF	PARTICIPE ENTIEREMENT
Sports nautiques	1	2	3	4	5
Tir à l'arc	1	2	3	4	5
Basket-ball	1	2	3	4	5
Badminton	1	2	3	4	5
Quilles	1	2	3	4	5
Jeux d'enfants	1	2	3	4	5
Activités de grimper	1	2	3	4	5
Curling	1	2	3	4	5
Danse	1	2	3	4	5
Hockey sur gazon	1	2	3	4	5
Activités de conditionnement physique	1	2	3	4	5
Gouret de salon	1	2	3	4	5
Football américain	1	2	3	4	5
Golf	1	2	3	4	5
Gymnastique	1	2	3	4	5
Balle-au-mur	1	2	3	4	5
Hockey sur glace	1	2	3	4	5
Activités de plein air	1	2	3	4	5
Patinage	1	2	3	4	5
Ski	1	2	3	4	5
Football (soccer)	1	2	3	4	5
Balle-molle/baseball	1	2	3	4	5
Tennis	1	2	3	4	5
Epreuves de piste	1	2	3	4	5
Epreuves de pelouse	1	2	3	4	5
Volley-ball	1	2	3	4	5
Haltérophilie	1	2	3	4	5
Lutte	1	2	3	4	5
Autre (Précisez)	1	2	3	4	5
Autre (Précisez)	1	2	3	4	5

18. Quel est votre sexe? (Encerclez le numéro de votre réponse)

1. MASCULIN
2. FEMININ

19. Avez-vous un degré en éducation physique ou l'équivalent (e.g., kinésiologie)? (Encerclez le numéro de votre réponse)

1. OUI
2. NON

20. Pendant votre formation universitaire combien de crédits d'éducation physique avez-vous suivis? (Encerclez le numéro de votre réponse)

1. AUCUN CREDIT
2. 1 A 24 CREDITS
3. 25 A 54 CREDITS
4. 55 CREDITS OU PLUS
5. JE NE SAIS PAS

21. Combien d'années d'expérience avez-vous dans l'enseignement? (Encerclez le numéro de votre réponse)

1. MOINS D'UNE ANNEE.
2. 1 A 4
3. 5 A 9
4. 10 OU PLUS

MERCI POUR VOTRE TEMPS ET VOTRE COOPERATION.

Retournez le questionnaire à votre directeur pour qu'il l'envoie à:

A.C.S.E.P.R. Comité des programmes adaptés
ATTENTION: E. J. WATKINSON, Ph.D.
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